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Cultural Resource Inventory and Evaluation Report of the W.R. Grace Export Plant City of Libby, Lincoln County, Montana

Joan L. Brownell
Billings Montana

August 2000

Report prepared for URS Corporation
Denver, Colorado

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TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

In May 2000, the United States Environmental Protection Agency (EPA) issued a Unilateral Administrative Order to W.R. Grace (Grace) for a removal action at the Export Plant in Libby, Montana. The actions to be conducted are to mitigate asbestos impacted materials at the Export Plant previously owned and operated by W.R. Grace. W.R. Grace contracted with URS Corporation to conduct the removal activity. URS Corporation contracted with Joan L. Brownell to complete a cultural resource inventory of the Export Plant. This report presents the findings and results of this inventory. This report also presents a historic property evaluation for National Register of Historic Places listing. A recommendation pertaining to determination of effect by the proposed undertaking on the historic property under Section 106 of the National Historic Preservation Act are also provided.

PHYSICAL DESCRIPTION

The Export Plant is located at the southwest corner of Highway 37 and Thomas Street, in Libby, Montana in Lincoln County, northwest Montana (Figure 1). The project area is situated in the NW1/4 of Section 3, T30N R31W. The project area contains approximately 10 acres and is situated on lands between the Burlington Northern Santa Fe Railroad tracks to the south and the Kootenai River to the north. Montana State Highway 37 defines the east boundary and a row of Douglas Fir trees bounds the property to the west (Figure 2).

The south half of the project area is covered with compacted gravel and the remainder is soil and gravel. Where vegetated, the site is covered with exotic weeds and grasses. The entire site is level and appears to have been graded. Piles of new lumber, plank flooring, old lumber and other materials as railroad ties and wood scraps are scattered throughout the site area. The Montana Department of Transportation also is storing materials for the Kootenai River Bridge rehabilitation at this location. A Remediation Staging Area consisting of mobile units has recently been erected within the site area.

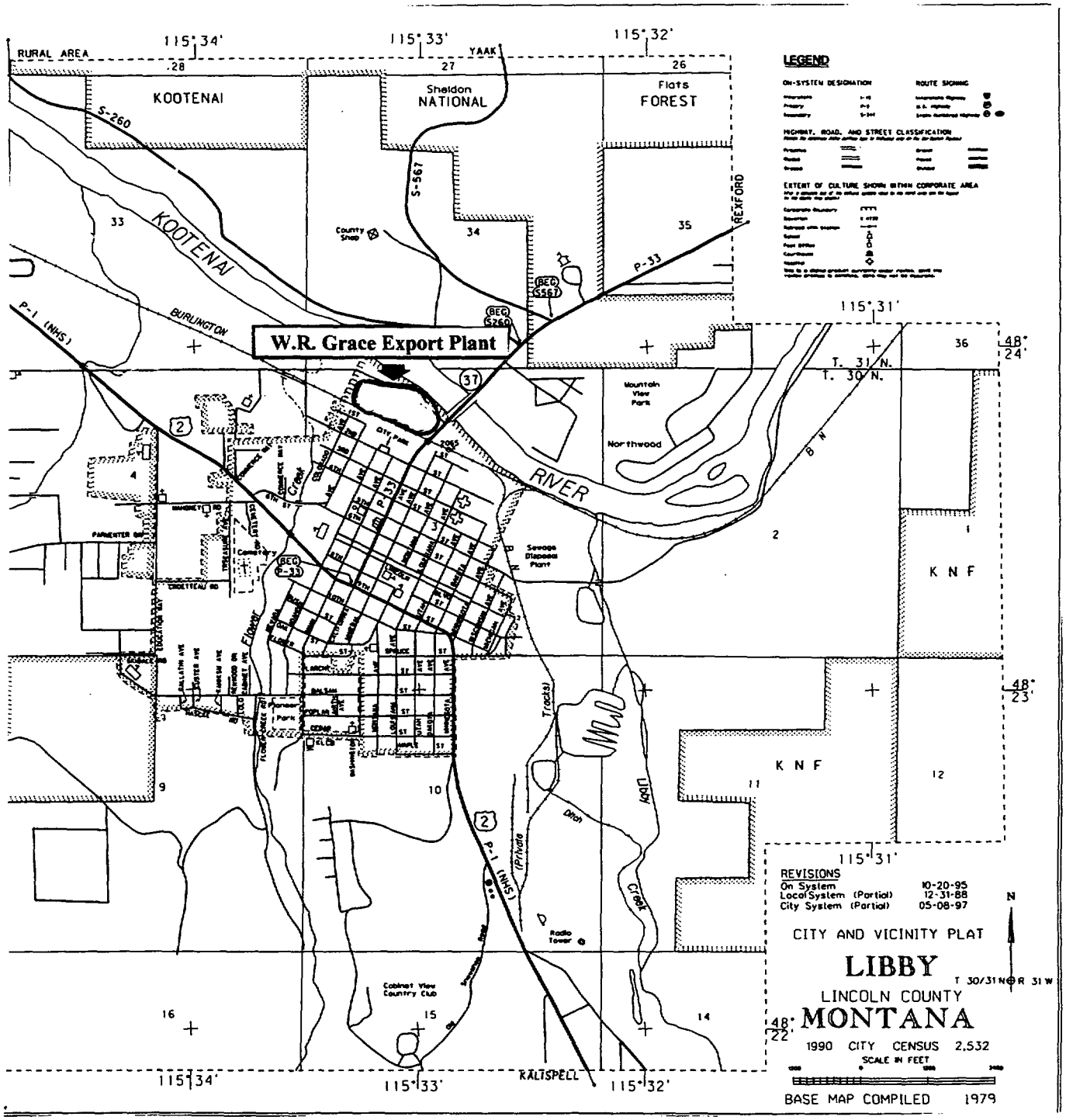

Figure 1: Location Map

Color Map(s)

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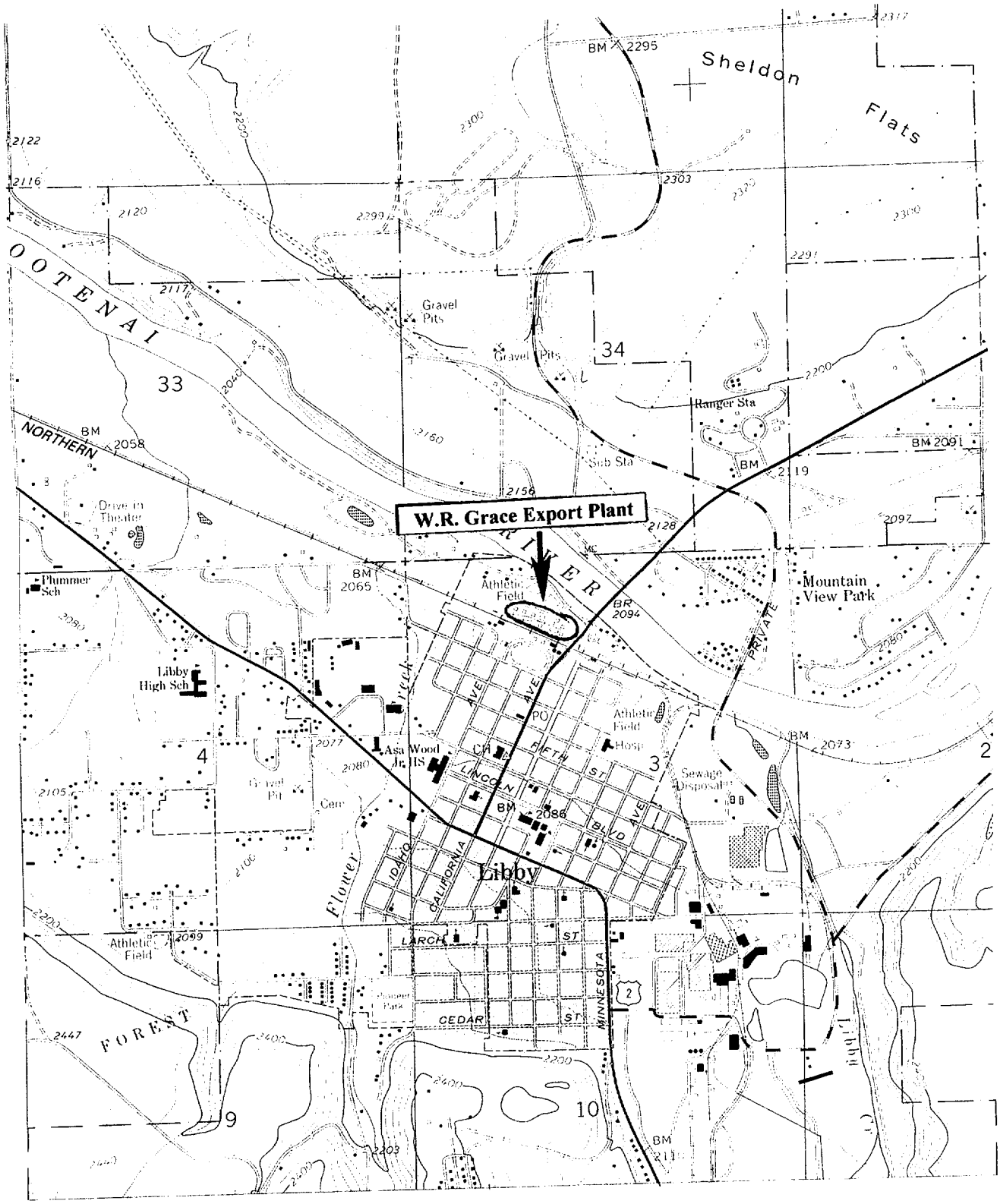

Figure 2: Topographic Map of Site Location

METHODOLOGY

A cultural resource site file and records search was requested of the State Historic Preservation Office for the project area. The records search showed that Kathy McKay conducted a cultural resource inventory for the Burlington Northern (formerly Great Northern) Railroad overpass and the Kootenai River Bridge on Highway 37 in Libby, Montana. Both the Great Northern Railway Line (24LN1737) and the Great Northern Railway Overpass (24LN1739) were considered significant and eligible for the National Register of Historic Places. Jon Axline of the Montana Department of Transportation prepared a detailed report on the Great Northern Railway Overpass (McKay 1997; Axline 1999).

Ms. Brownell, assisted by Burt Williams, conducted a cultural resource survey on July 30, 2000 at the project area. The survey consisted of 30 foot transects over the project area. No prehistoric properties were identified during the survey but identified both historic and modern buildings and structures with the project area. Information was recorded on the physical attributes of each building and structure and included overall composition, materials, stylistic details, and alterations. Color print photographs were taken of each building.

Both primary and secondary sources were investigated for the documentation of the historic buildings. Primary sources included maps, newspaper clippings, vertical historical files, county assessor records, county deed records and interviews with local informants. Repositories visited included the Parmly Billings Library, the Montana State University-Billings Library and Rocky Mountain College Library, all in Billings, MT; the Libby County Library, and the Lincoln County Courthouse in Libby, MT; the Montana Historical Society Library and Archives and the Montana State Historic Preservation Office in Helena, MT.

All properties inventoried were evaluated for their significance according to criteria for listing in the National Register of Historic Places and recommendations made on Register eligibility. A determination of effect recommendation of the historic property followed the evaluation, as presented in 36CFR800 for Protection of Historic Properties and 36CFR68 for Treatment of Historic Properties (Federal Register May1999; July 1999).

HISTORIC OVERVIEW

Development of the Town of Libby

The Kootenai River in northwestern Montana served as a transportation route for the numerous bands of the Kutenai Indians of the region and provided a primary food, fish. In the early 1800s, fur traders explored the area, most notably David Thompson, the preeminent geographer of the region. Thompson developed trading posts throughout northwestern Montana for the North West Fur Company, including the short-lived Kootanae House, near Kootenai Falls approximately ten miles northwest of Libby. Northwestern Montana remained relatively isolated into the second half of the nineteenth century, except for occasional passage of trappers, explorers and missionaries. In fact, the British did not cede control of this region south of the 49th parallel until June 1846 (Malone et al 1991:41-47; Northwest Archaeological Associates 1994:15-76; Spritzer 1979:1-44).

The town of Libby had its early beginnings as a placer gold mining camp known as Libbyville in the mid 1860s. Libbyville reached a peak population of 500 to 600 but faded quickly. In the mid to late 1880s, placer gold discoveries rejuvenated settlement along Libby Creek as most placers were claimed along Libby Creek and its tributaries. In 1889, the discovery of the Snowshoe Mine, a lead and silver property, further encouraged the development of the Libby area (Johnson 1963:46-49; Northwest Archaeological Associates 1994:172-209).

The arrival of the Great Northern Railway ensured the permanence of the town of Libby. In 1889-90, James J. Hill, of the St. Paul, Minneapolis & Manitoba Railway (renamed the Great Northern Railway in 1890), began to push his line from northcentral Montana to the shoreline terminals at Everett and Seattle, Washington. The route chosen along the Kootenai River spurred townsite speculation at the mouth of Libby Creek. This new town soon boasted of fourteen saloons and several mercantiles Unfortunately, the townsite location missed the railroad right-of-way and they had to relocate the "old" town one-half mile north adjacent to the Great Northern tracks. The Great Northern reached Libby in April 1892. The inauguration of train service between St. Paul and Spokane occurred on August 14, 1892. Full train service from St. Paul to Seattle began in June 1893 (Hidy et al. 1988:72-85; Northwest Archaeological Associates:97-102).

The arrival of the Great Northern Railway into northwestern Montana stimulated significant development and settlement in the region. By the turn of the century, the town of Libby had a thriving commercial district with five general merchandise stores, a dressmaker, tailor, two hotels, a boarding house and four saloons. Libby also claimed a new hospital and school building. In 1906, the Dawson Lumber Company established the first permanent sawmill in Libby. After a devastating fire in 1906, the town quickly rebuilt. Libby's confirmation as the county seat in 1911 secured its existence as a viable community in the newly created Lincoln County. Lincoln County was created out of Flathead County in 1909 and Libby finally won the county seat after an election dispute with Eureka (Axline 1999: 3; Johnson 1963: 52-54).

In 1911, Julius Neils bought out the existing Dawson sawmill in Libby and began to build a lumber empire in northwestern Montana that dominated Libby's economy throughout most of the twentieth century. The St. Regis Paper Company succeeded the J. Neils Lumber Company and is still a major economic force in the town of Libby and the region (Johnson 1963:54-55; Northwest Archaeological Associates 1994: 223-261).

Between 1910 and 1913 the population of Libby nearly doubled to 1500. In 1925, the population was 2500 with the J. Neils Lumber Company employing 550 men and local mines employing 150. The Depression affected the population and it was not until after World War II that employment numbers increased. By 1953, the J. Neils Lumber Company had 1100 employees. The construction of Libby Dam, 17 miles above Libby on the Kootenai River, boosted the economy of Libby and Lincoln County between 1967 to 1973 (Northwestern Archaeological Associates 1994:145; *The Spokesman-Review* 1953:14; Spritzer 1979:136-153).

Vermiculite Mining

Although the lumber industry is recognized as the primary economic force in Lincoln County, the vermiculite deposits in the Rainy Creek mining district, located seven miles northeast of the town of Libby, has played a significant role in the economic community. Vermiculite is defined as "a group of micaceous clay minerals. Grains undergo marked exfoliation when heated at 800 to 1100 C, producing wormlike particles that entrap air and are used as an insulator and lightweight aggregate" (Bates and Jackson 1984:552-553). Asbestos is present in the vermiculite bearing rock at Libby.

The development of the vermiculite deposits "marked the initiation of a new industry not only in this state but in the nation" (Perry 1962:23). Edward N. Alley accidentally discovered vermiculite during World War I while looking for vanadium, a metal used for hardening steel (sources differ on the date of his discovery). While prospecting in the Rainy Creek area, the heat from his candle supposedly caused nearby mica to expand. Alley experimented and eventually built an expanding plant at Libby in 1923 to convert vermiculite into a product with the trade name of "Zonolite" and began small scale production in 1925. The deposits of vermiculite on Rainy Mountain were the first to be worked in the United States. Early uses of vermiculite included fire, cold and sound insulation (Johns 1970:146-47; Perry 1962:70; Pardee and Larson 1029:17-29; Perry 1948:23-25).

The ownership of the mine changed in May 1934 when outside interests bought out Alley and his Zonolite Company. Other companies formed in the late 1920s and early 1930s and extracted the vermiculite from the Rainy Creek deposits. In 1939, two of these companies, the Zonolite Company and Universal Insulation Company, combined under the name "Universal Zonolite Insulation Company" and later in 1948 changed the name to "Zonolite Company." In 1963, W.R. Grace purchased the Zonolite Company. Grace owned the mine until its closure in 1990 (Johns 1970:146-47; Perry 1962:70; Perry 1948:23-25; URS Corporation 2000:1-6).

Production of zonolite increased over the years as the product became recognized and widely used. By 1929, a few years after Alley started production, the Zonolite Company reported "1,500,999 lbs mined and converted into the heat-expanded product zonolite and 100 tons sold in crude form" (Perry 1929:24). Shipments of crude and expanded vermiculite rose to about 20,000 tons in 1940 and 75,000 tons in 1946. In 1948, the Zonolite Company erected a 1,000 ton mill for concentrate which further increased production. By 1954, the Zonolite Company reported an annual production of 160,000 tons and employed 140 people. Vermiculite was shipped to 35 processing plants in the United States and to eight foreign counties. In 1974, a new "wet" mill facility was put into operation by W.R. Grace. The product, Zonolite Attic Insulation, was discontinued by Grace in the early 1980s for economic reasons. In 1985, W.R. Grace produced 173,000 tons of vermiculite and in 1986 produced 166,000 (Perry 1948:25; *The Spokesman-Review* 1953:14; Montana Department of Environmental Quality n.d). The mine was shut down in 1990 "because the market for one of its major products - a spray-on fire-protection for the

construction industry disappeared and the mine was no longer economical to operate (*Western News* 2000).

Earl Lovick, the manager of administration of Libby Operations for W.R. Grace in 1980, came to work for W.R. Grace in 1948. The following excerpts are from an interview with Lovick in 1980 and provides a brief synopsis of how the vermiculite operations worked.

> The mine is an open pit mine. We drill and blast most of the material. It is loaded where it is transported by front end loaders into haul trucks which haul to a transfer point where it is transported from the mine to the mill for concentration. . . .
>
> At the mill, the ore is concentrated and upgraded and it is shipped in a surface triumph [sic] to bins about half-way down the mountain and hauled by truck from there to the screening plant. It's a truck haul of about two-and-a-half miles. At the screening plant the material is sized. . . . After concentration, all of the sizes are all mixed together. They all go through a dryer. But we ship out five commercial sizes of material, and the sizing for that takes place at the screen plant.
>
> We try to maintain production at a constant rate the year round. We have been able to do this because we have built storage for our finished products. During periods of low market we can continue operating on a normal basis, put the production into storage and then during seasons of the year when business is higher than our production capacity is we can take the material out of production –out of storage—and ship it (Lovick 1980).

W.R. Grace Export Plant

Mr. Lovick mentions the existence of an expanding plant operated in Libby. This facility in Libby was known as the Export Plant or Expanding Plant where the vermiculite would be heated, expanded and then bagged for shipment. Many locals call this process "Popping." Vermiculite was also stored at this location. The concentrate was hauled by truck to Libby to the export plant where it was expanded or shipped unexpanded. However, most of the vermiculite was shipped as crude vermiculite to expanding plants throughout the country. According to Martin McCann, a retired railroad division engineer, the vermiculite was cheaper to ship raw rather than expanded, where the ratio was one car versus eight cars expanded. Jack Deschazer thought that most of the bagged Zonolite in Libby was locally used (Lovick 1980; Stringer 2000; Deschazer 2000; Perry 1948:24-25; McCann 2000).

The 1893 General Land Office survey map for this site location shows a residence identified as Leonard between the railroad tracks and the Kootenai River in the NW1/4 of Section 3, T30N R31W. However, Lincoln County deed records show Frank Leonard did not obtain title to the property until February 1898 when he purchased the land from a trust company representing the Northern Pacific Railroad. Most of the town of Libby belonged to the Northern Pacific Railroad as part of their land grant provided by Congress in 1864, a claim that was rectified in 1897 (General Land Office 1893; Lincoln County 1898; Axline 1999:3).

In February 1901, Frank and Anna Leonard of Libby, Montana transferred to Charles R. Leonard (son?) of Butte, Montana this property described as approximately 13 acres of land "along the south bank of the Kootenai." In July 1906, Charles and Fanny Leonard of Butte transferred back to Frank the same property in Section 3 T30N R31W consisting of 13 acres or less. Frank Leonard in February 1909 once again transferred the property to Charles Leonard. This time the Leonards of Butte held the land until the end of July 1937 when Ralph Smithberger of Libby purchased the property (now 15 acres or less). Smithberger immediately sold the same to the Zonolite Company in August 1937 (Lincoln County 1901, 1906, 1909, 1937). In 1939, this property became part of the newly formed Universal Zonolite Insulation Company, a merger of the Zonolite Company and Universal Insulation Company (Northwest Archaeological Associates 1994:209).

No buildings are shown at the site location on the 1927 Sanborn Fire Insurance Map for the town of Libby. The 1942 revision of the 1927 Sanborn map shows four buildings and storage bins at this location identified as the "Zonolite Co's Storage & Shipping Plant." The formation of the Universal Zonolite Insulation Company in 1939 allowed for the financial capability to construct this export plant between 1939 and 1942 (Sanborn Company 1927; 1942 revision).

The buildings identified on the 1942 revision of the 1927 Sanborn map are a loading shed, an office, two warehouses, and four wood zonolite tanks. Two of the buildings are still standing, the raw storage building and the bagging plant. A railroad spur track is situated between the warehouses and the tanks. The facility evolved and at least six buildings are visible in a 1953 aerial photograph in *The Spokesman-Review* of the site area. Five of the buildings shown in this photograph are still extant today, including the bagging Plant, the raw storage building, the expanding plant, the storage building and the scale building. Since the 1953 photograph, the

zonolite tanks and one warehouse have been removed. An 1983 assessor report indicates the loss of several smaller buildings, including a boiler room and two pump house. Mel Burnett thought the tanks or silos had been removed in the past 12 years or so (Sanborn Company 1929 (1942 revision); *The Spokesman-Review* 1953:14; Lincoln County Assessor 1983; Burnett 2000).

W.R. Grace purchased the property in April 1963 from the Zonolite Company. The expanding operations at the Export Plant ceased prior to 1981 and area used only for packaging and exporting milled materials after that time. In 1980, Earl Lovick stated that these buildings were only used for storage (Lincoln County 1963; URS Corporation 2000: Lovick 1980).

W.R. Grace held the property until May 1994 when they transferred the land to the City of Libby (Lincoln County 1994). W.R. Grace leased the property to Jim Ray around 1985-86. Ray operated a retail lumber business at this location. Mel and Judy Burnett bought the business from Ray in 1989 and presently lease the land and buildings from the City of Libby (Burnett 2000).

Color Photo(s)

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INVENTORY RESULTS - W.R. GRACE EXPORT PLANT (24LN1812)

The W.R. Grace Export Plant is situated on approximately 10 acres within the town of Libby, Montana (Figure 3). The site consists of five historic buildings associated with the original operation. The historic buildings include the expanding plant (now a planer and storage building), the raw storage building (now housing lumber), the bagging plant (also lumber storage), a scale building (also lumber storage), and a wood frame storage building (used for storage). Three railroad spurs are also found within the project area. One is abandoned and two are still operable. There is one historic structure, a loading dock and a modern structure, a cyclone dust separator. The site also contains two modern buildings, the retail office and a small shed. There is also a concrete foundation that once held a dry kiln (Figure 4). See previous section for historical information on W.R. Grace Plant.

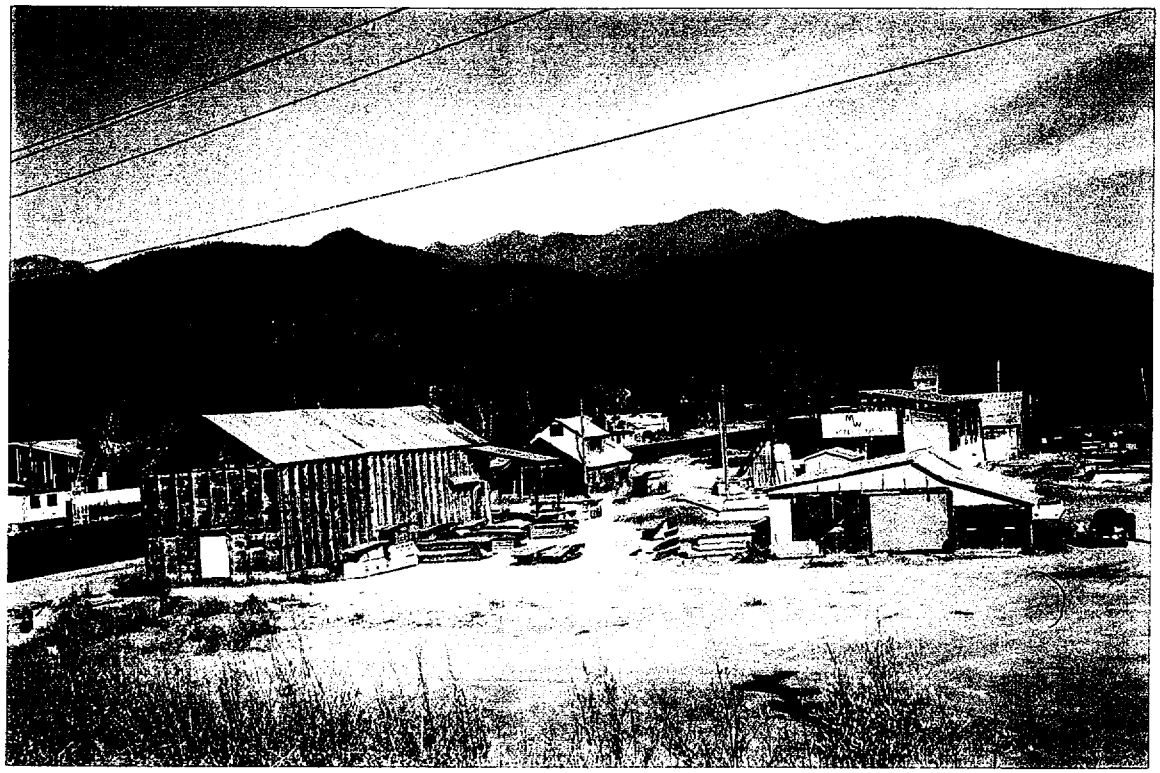

Figure 3: Overview of Site 24LN1812, view to west

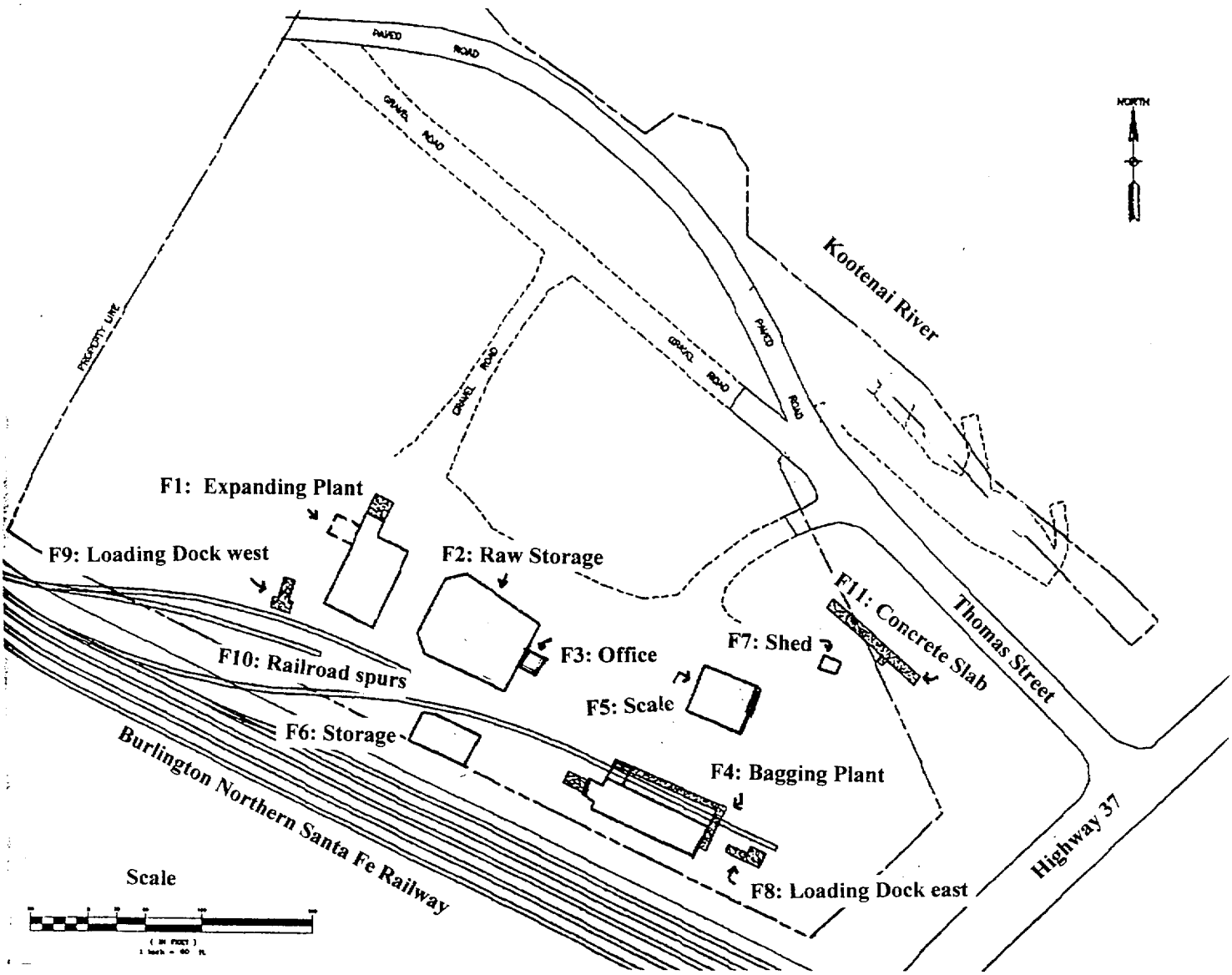

Figure 4: Site Map of W.R. Grace Export Plant (24LN1812)
Map derived from Bowles and Messick July 2000

Feature 1: Expanding Plant (Lumber Storage)

This one-story rectangular wood frame historic building sits on a low concrete foundation (Figures 5, 6 and 7). The main building measures 80 feet north/south by 32 feet east west. The building has a gable roof covered with corrugated metal siding with slightly extended eaves and visible rafter ends. A superstructure sits near the center of the ridgeline on the east roof slope. It measures 10x10 feet, has a shed roof and is covered with corrugated steel. A small entry is located on its south wall. On the west slope near the center of the ridgeline is a shed roofed wood louvered vent and a tall protruding stovepipe.

All walls are clad with corrugated metal. A row of window openings (boarded shut with plywood) span the east and west walls with nine openings on the east wall and eight on the west wall. The east wall also contains a wood door at its south end. The west wall holds a loading wood door mid-wall at its north end. The south end wall has a centered wood door topped by triple multi-paned window (panes missing). Vertical beadboard tongue and groove double doors are centered on the north end wall surrounded by a large frame opening now infilled with plywood (original opening?).

A steel frame open sided shed roof awning (20 feet by 18 feet) that houses the planer extends off the addition to the north. Steel beams are set on concrete piers. A recently constructed wood frame enclosure that measures 16 feet by 18 feet extends off the west side of the north wall under the awning. The enclosure is clad with plywood and has a plywood door on its east wall..

A steel frame structure (19 feet x16 feet) also stands 10 feet west of the building towards the north end. This steel frame functions as a truck ramp and holds a cyclone dust separator that is connected to the main building by a large pipe.

The building is presently used for lumber storage and planing. It contains one large room and several smaller room and two restrooms. According to Alan Stringer, this was originally the expanding room which heated the vermiculite into the commercial product Zonolite (Stringer 2000). The same building is shown on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953;14). Earl Lovick mentioned that women worked at the expanding plant in the town of Libby but by 1980, W.R. Grace used the building for storage space and used one room as a training room (Lovick 1980). According to Mel Burnett, who operates Millwork West Lumber,

Figure 5. Expanding Plant, south and west elevations, view to north/northeast

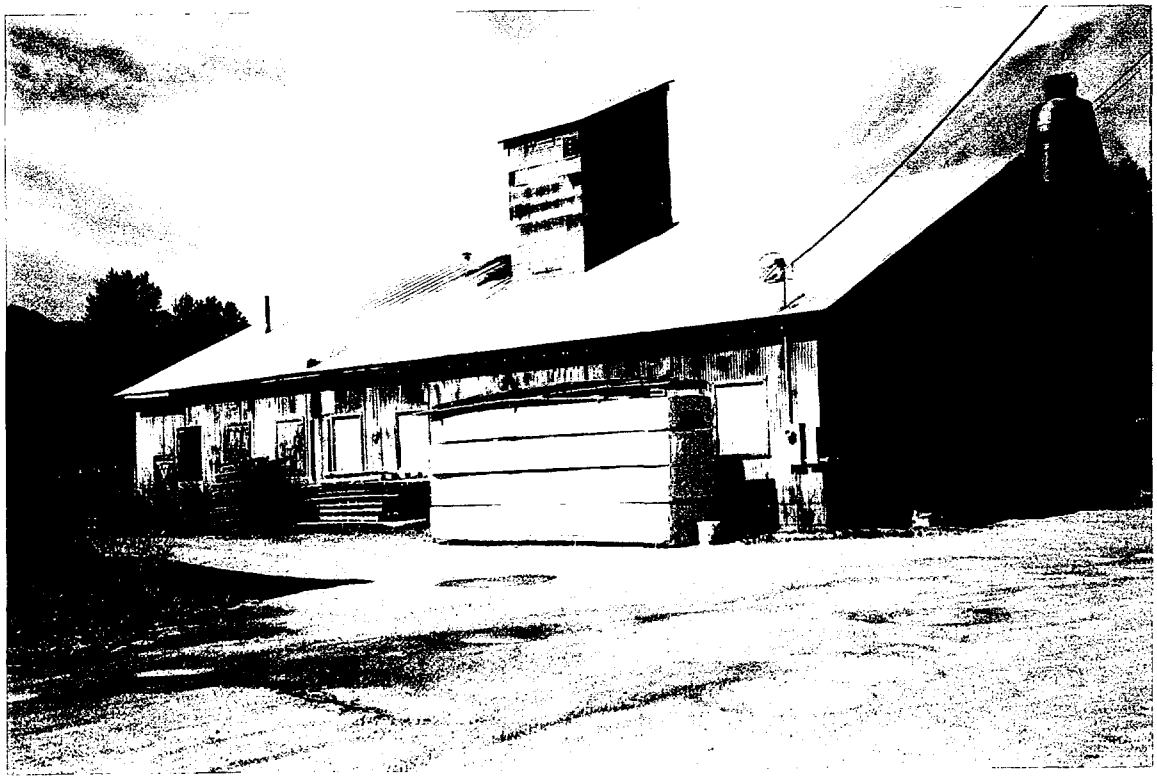

Figure 6. Expanding plant, north and east elevations, view to southwest

the planer awning and cyclone structure were built around 1986 by Jim Ray. Burnett enclosed the planer around 1994 (Burnett 2000).

The integrity of this building has been slightly compromised by the closure of most openings and the introduction in its northwest corner of a steel awning, planer enclosure and the cyclone structure. It is in fair condition.

Figure 7. Expanding Plant, north and west elevations, view to southeast

Feature 2. Raw Storage Building(Lumber Storage)

This large rectangular historic building is of post and beam construction and measures approximately 71 feet north/south by 84 feet east/west (Figures 8 and 9). The posts are set in square concrete piers that vary in height along its length and a low concrete wall fills the space between the piers. The building has a low gable roof covered with corrugated steel and extended eaves with exposed rafter ends. Cross braces support the posts at the roof.

The lower portion of the north side is partially sided with plywood across its lower wall. Barbed wire runs along the top of the plywood and the rest of the wall is open. The east wall of the building is enclosed with corrugated metal on its northern portion and a chain link fence across the lower remaining wall. The open upper wall is partially covered by a large wood sign that reads "Millwork West Retail Lumber." The lumber office (Feature 3) sits directly in front of the east end wall.

The south and west walls are covered with corrugated steel over horizontal boards. The walls are slanted resulting in a irregular slanted southwest corner. The gable end is open and a space separates the roof and the south wall.

A dump hopper and bucket elevator stands at the center of the east end of the building. The concrete floors exhibit two sets of parallel raised tracks that run the length of the building to either side of the hopper.

According to Alan Stringer, this building was for raw storage of vermiculite (Stringer 2000) Eldon Adkinson, who works at the lumber yard, remembers as a boy jumping into the raw material from a rope swing tied to the rafters of this building (Adkinson 2000). The 1942 revision of the 1927 Sanborn Map shows a similar building identified as a loading shed and the slanting south wall is visible. This building is also shown on a 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14). A 1983 assessor report identifies this building as a raw stockpile (Lincoln County 1983).

The building is in fair condition and retains good integrity with minor alterations to wall coverings.

Figure 8. Raw Storage Building, north and east elevations, view to west

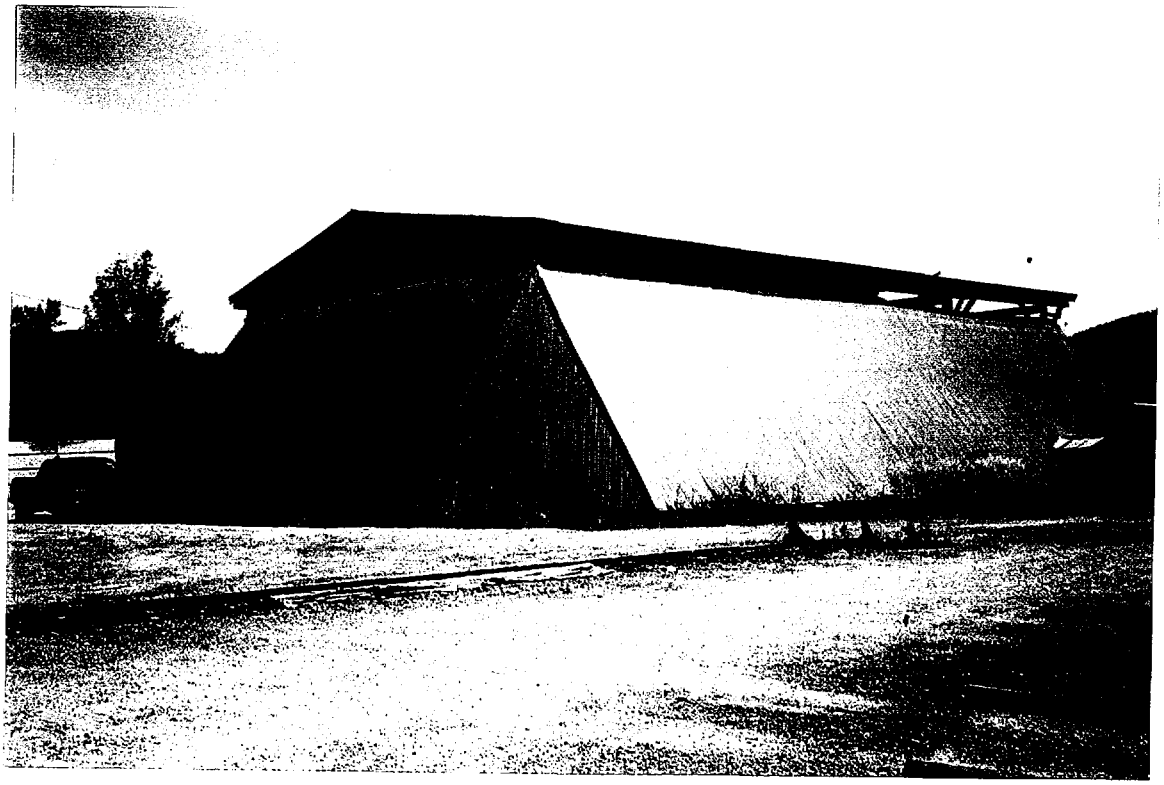

Figure 9. Raw Storage Building, south and west elevations, view to northeast

Feature 3. Office

This modern small wood frame rectangular building measures 14 feet north/south by 16 feet east/west (Figure 10). The building has a gable roof covered with asphalt shingles and extended enclosed eaves. The building sits on concrete pads and has I beams for floor joists. It is clad overall with shiplap siding with corner boards, with vertical board on the upper portion of the south wall. Both side walls have a nine light window covered with metal mesh. The west end wall is symmetrical with a centered door entry framed to either side by a nine light window covered with metal mesh. Decorative elements to the building include architrave trim and fluted columns at the door frame, white picket fence wall sections to either side of the door and a scalloped vergeboard. Three wood stairs and a small wood stoop approach the doorway. Mel Burnett built this building on site around 1994 (Burnett 2000). It is in good condition.

Figure 10. Office, south and east elevations, view to northwest

Feature 4. Bagging Plant (Lumber Storage)

This large rectangular historic building measures 108 feet east/west by 32 feet north/south (Figures 11 and 12)). The building has a gable roof covered with corrugated steel. A row of three shed roof dormers extend off the south roof slope near the east end wall. The side walls of the dormers are clad with corrugated metal and the end walls of the dormers are boarded shut.

The building sits on a high concrete foundation with steel L beams set on top of the concrete. The building is interior sheathed with 12X2 feet boards with external 8x8 feet beams with wall reinforced with cable. The east gable end is covered with horizontal boards and has openings now boarded shut with plywood. The east end wall holds a centered sliding wood door (covered with metal plate). A metal ramp approaches the sliding door.

The south wall contains two horizontal tongue and groove double doors adjacent to each other. Towards the eastern portion of the wall are two openings with a single glass pane. The north wall at its northwest end has a double metal door topped by an opening (boarded shut with plywood) that apparently held a conveyor. An open sided shed roof awning projects to the north. It has concrete piers with hollow beams to support the roof. It is presumed that the conveyor loaded bags of Zonolite into railcars on the spur track.

An abandoned railroad spur parallels the entire north side of the building. A wood deck (3 feet wide) runs along the length of the building and north of the spur a concrete slab (5 ft wide) runs the length of the building.

In front of the east end of the building is a concrete ramp (24 feet by 12 feet) that approaches a concrete dump hopper. The hopper is sheltered by a open sided gable roof shed supported by wood posts. A bucket elevator is centered against the east end wall and protrudes through the gable roof to above the gable roof. A compressor sits on a platform at the top of the elevator. A metal stair protected by a metal cage climb the wall to the top of the elevator. Chain link fence surrounds the hopper and elevator .

The 1942 revision of the 1927 Sanborn map identifies this building south of the spur track as a Zonolite warehouse (Sanborn 1927). The building is visible on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14)). A 1983 County assessor report identified this

Figure 11. Bagging plant, south and east elevations, view to northwest

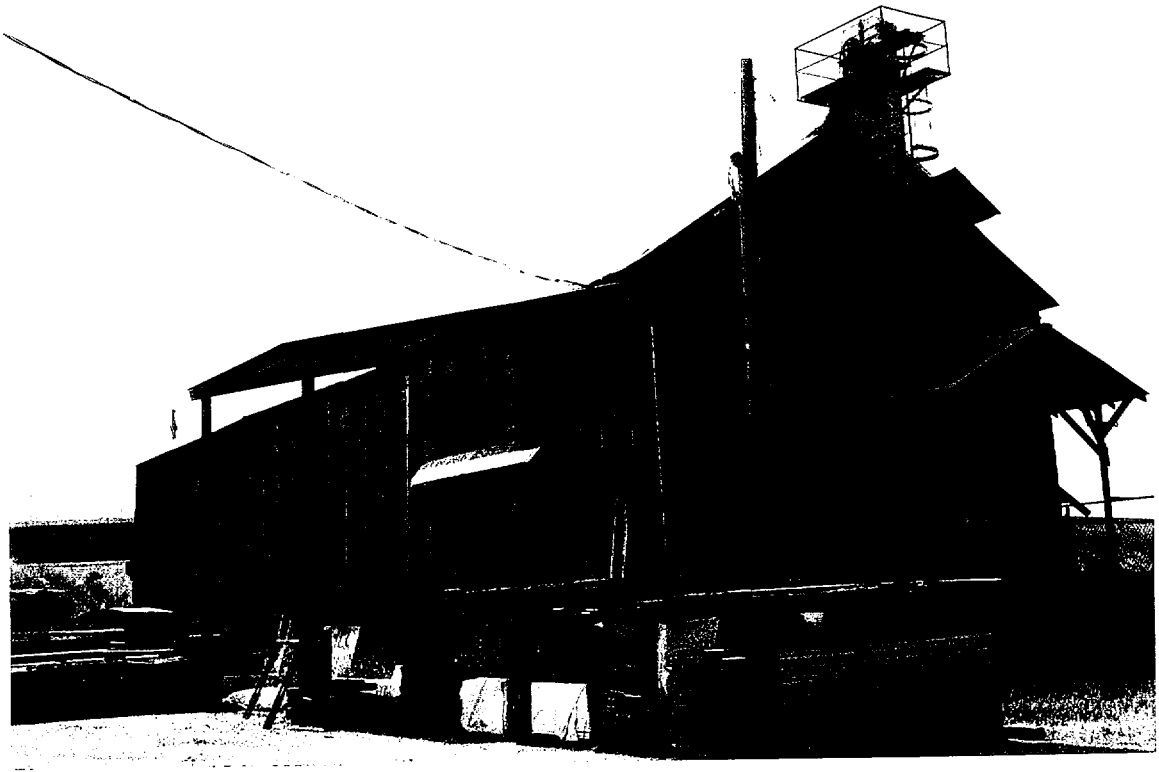

Figure 12. Bagging Plant, north and west elevations, view to south/southeast

building as the export bagging building (Lincoln County 1983). Martin McCann remembers that the bags were heavy paper, about the size of a large flour sack (McCann 2000). Jack Deschazer thought that most of the bagged materials was for local use (Deschazer 2000).

The building is in fair condition and retains its historic appearance and character.

Feature 5: Scale Building (Lumber Storage)

This wood frame historic building measures 47 feet north/south by 53 feet east/west (Figures 13 and 14). It sits on a low concrete foundation. The building has a gable roof with a shed extension to the north. The roof and gable ends are covered with corrugated metal. The side walls are also clad with corrugated metal. The gable end walls are filled with large sliding doors, one half corrugated metal and the other half wood corresponding at each end. The east end wall of the shed extension has double wood doors while the west end wall just holds a opening boarded shut with plywood. The north wall has a row of four large openings, two filled with plywood and two covered with plastic. A six light window is towards the east end of the wall. The south wall holds four openings all boarded shut with plywood.

The interior of the building still holds the scale and weights. The building is in fair condition and has retained integrity with minor alterations primarily the closure of openings with plywood.

According to Alan Stringer, this was the Scale house (Stringer 2000). No scale house is shown on the 1942 revision of the 1927 Sanborn map, indicating it was constructed after 1942. Although it is difficult to see, the roof line of this building appears visible on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14), thereby indicating the building was erected between 1942 and 1953. It still contains a functioning Fairbanks scale. The scale was last used for weighing rocks several years ago (Burnett 2000)

The building is in fair condition and retains good integrity although slightly compromised by closure of most openings.

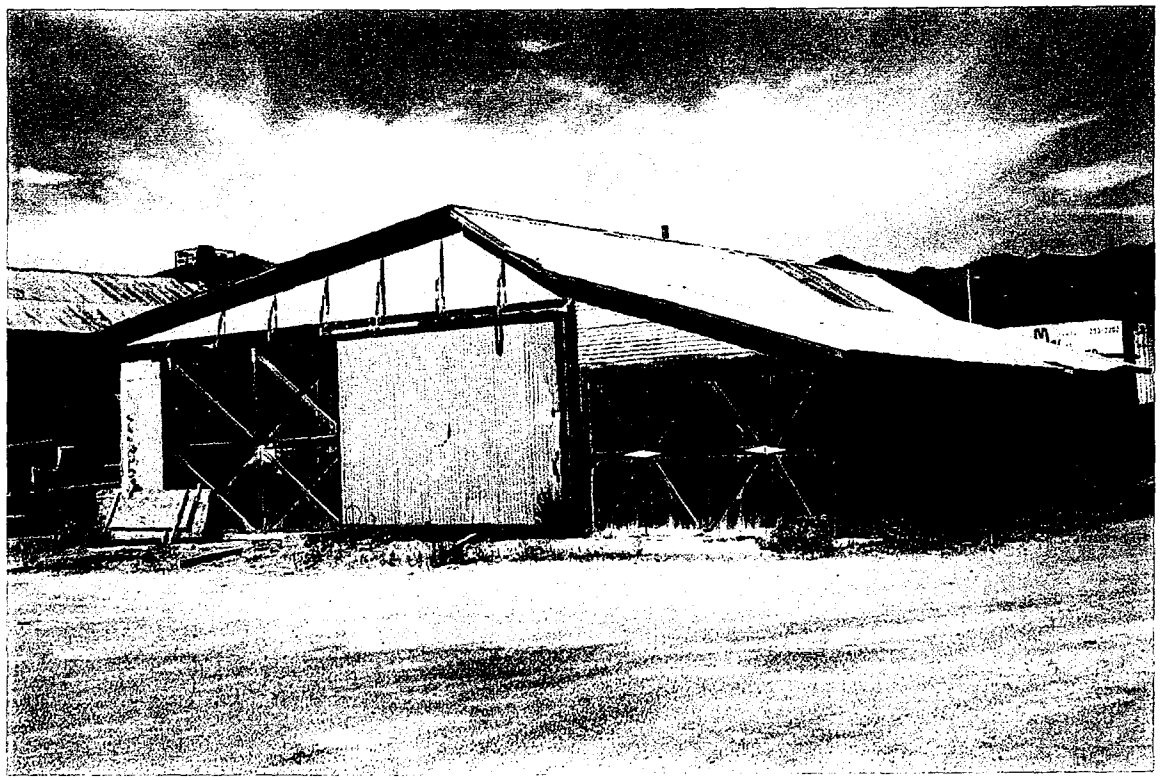

Figure 13. Scale Building, north and east elevations, view to west

Figure 14. Scale Building, south and west elevations, view to northeast

Feature 6. Storage Building

This wood frame rectangular gabled roof historic building sits on a low concrete foundation and measures 32 north/south by 56 east/west (Figures 15 and 16). The gable roof is covered with corrugated

steel with an extended roof slope and exposed rafter ends. A superstructure sits centered on the roof. The walls and roof of the superstructure are covered with corrugated metal. The east and west sides both contain a centered opening boarded shut. The north and south walls hold a pair of openings also boarded shut.

Shiplap siding clads the walls. The north wall has openings (now boarded shut) at either end of the wall. The south wall has three openings (also boarded shut) that span the wall and a large wood door topped by a transome (boarded shut). Both the east and west end walls hold centered sliding vertical tongue and groove doors that extend into the gable end. Above the doors are centered paired openings, with the west opening still exhibiting some framing.

This building is not shown on the 1942 revised 1927 Sanborn map but is visible in its present form on the 1953 aerial photograph of Libby (Sanborn 1927, *The Spokesman-Review* 1953:14), indicating it was constructed between 1942 and 1953. Alan Stringer stated this building was used for storage (Stringer 2000).

The building is in fair condition and retains overall integrity with minor alterations of boarding shut most openings.

Feature 7. Shed

This small modern shed measures 5 feet by 7 feet and sits on I-beams (Figure 17). It has a gable roof covered with corrugated metal, a metal ridgecap and extended eaves with exposed rafters. The shed is clad with beveled tongue and groove shiplap board with corner boards. The south wall contains a wood plank door. The interior of the shed is finished with tongue and groove.

The shed is in good condition. This shed was built by Mel Burnett with materials he donated for the dry kiln project at the site location (Burnett 2000).

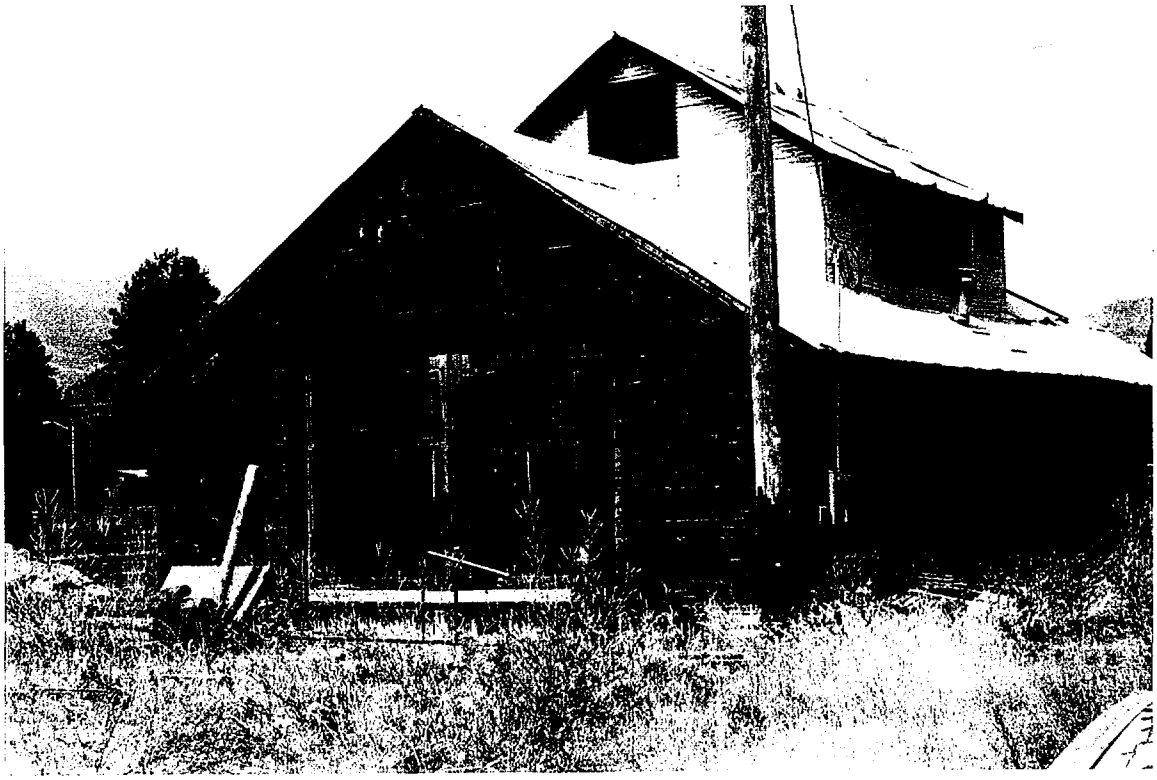

Figure 15. Storage Building, north and east elevations, view to southwest

Figure 16. Storage Building, south and west elevations, view to northeast

Figure 17. Shed, south and east elevations, view to northwest

Feature 8: Loading Dock (east)

This loading dock consists of a concrete platform that measures 15 feet square and a concrete ramp that measures 20 feet by 8 feet (Figure 18). I-beams run along the sides of the ramp and two sides of the platform. Iron clamps are set along both walls of the ramp and the short wall of the platform. The platform stands approximately 35 inches in height.

The railroad spur ended just beyond this loading dock to the north. The 1942 revised 1927 Sanborn map shows a gabled roof building with what appears as an open south wall situated where this loading dock is located. The dock is in good condition.

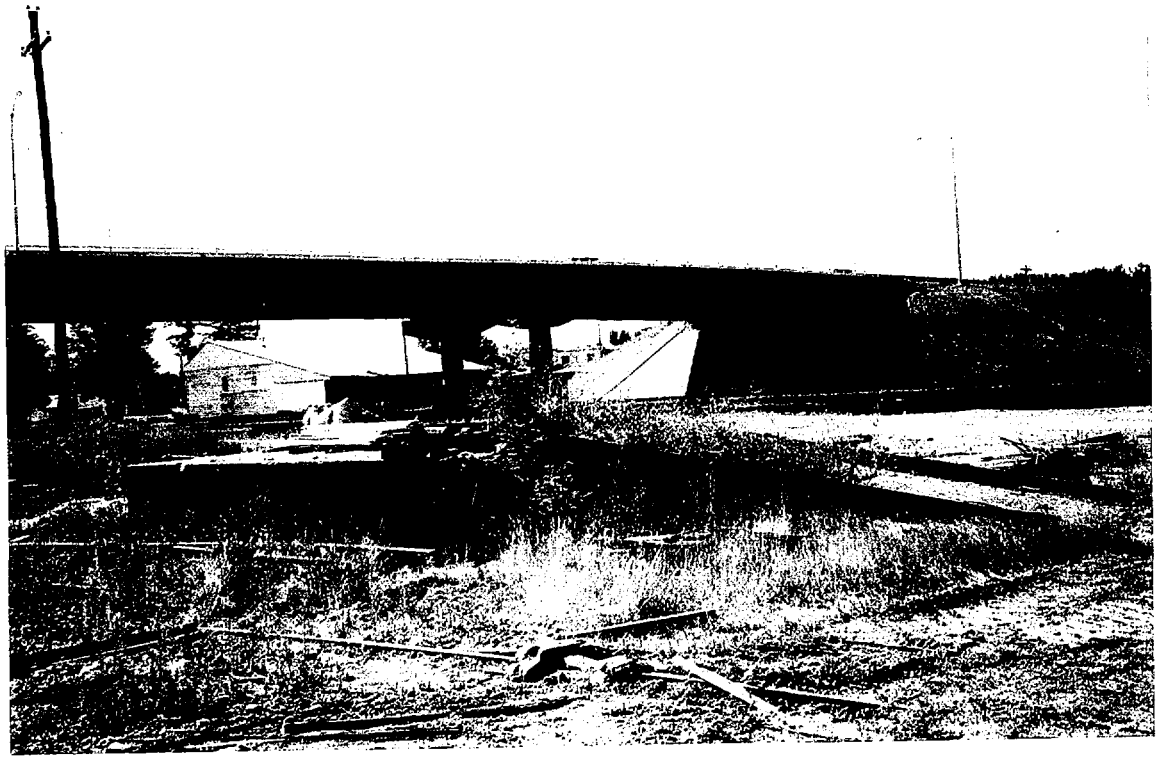

Figure 18. Loading Dock (east), north and west elevations, view to south/southeast

Feature 9: Loading dock (west)

This modern loading ramp consists of a concrete platform that measures 10.5 feet by 19 feet and a concrete ramp that measures 20 feet by 10 feet (Figure 19). The platform is formed by horizontal railroad ties for side walls filled in with gravels. The ramp side wall are horizontal boards. All side walls are held in place by vertical studs slotted through iron clamps.

Mel Burnett built this loading dock in 1996 (Burnett 2000)

Figure 19. Loading Dock (west), north and east elevations, view to south/southwest

Feature 10: Railroad Spurs

Three railroad spurs enter the site area from the west (Figure 20). One spur was abandoned approximately six years ago and two others are still active and used for the lumber business. The abandoned spur extends to the north of the storage building and runs along the entire length of the Bagging Plant and ends beyond the concrete ramp.

According to Martin McCann, this was called the "Z-bag" spur. He remembers replacing the railroad ties to this spur several times. He also remembers that only 1 or 2 cars and sometimes three would move the bagged zonolite to ship from this site. Don Wolley of the Burlington Northern Santa Fe thought that the Great Northern probably built and maintained the spur but that Grace owned and paid for it (McCann 2000; Wolley 2000).

Feature 11. Concrete slab

This concrete slab measures 10 feet wide and 110 feet in length (Figure 21). It consists of three sections, the center section being slightly lower with an adjacent small concrete slab with plumbing fixtures.

The foundation is from a dry kiln that was built around 1994-95. The dry kiln was recently moved to Troy (Burnett 2000).

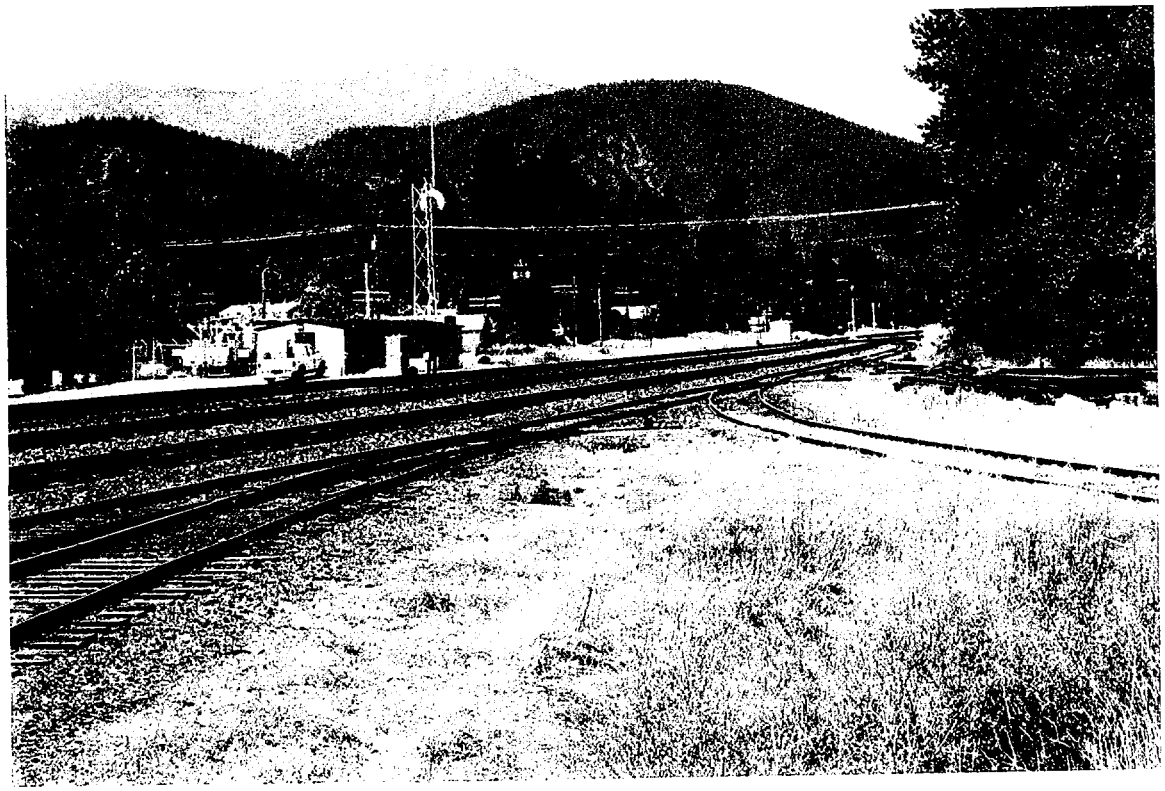

Figure 20. Railroad spurs, view to west

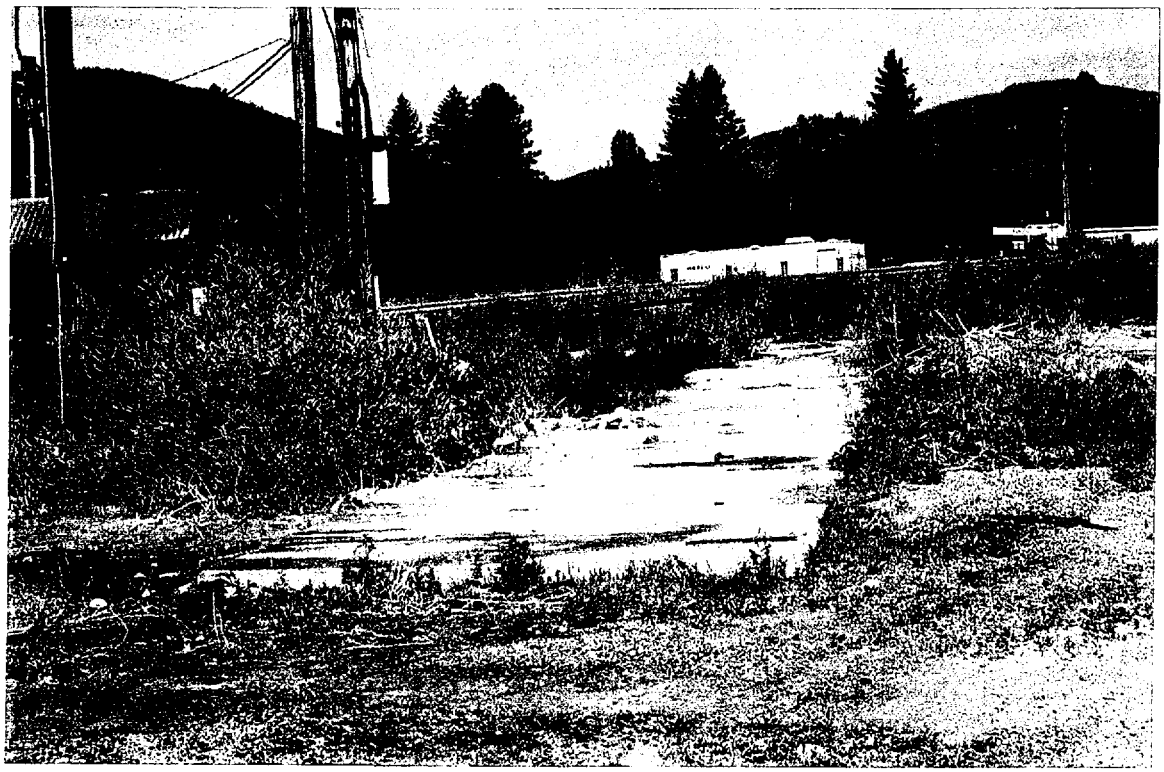

Figure 21. Concrete slab, view to west

NATIONAL REGISTER EVALUATION

Site 24LN1812: W.R. Grace Export Plant

Integrity

The W.R. Grace Export Plant retains good integrity. Most of the extant buildings have received minimal modifications since their construction and none of these alterations are intrusive.

The Export Plant retains integrity of location. The integrity of setting has been affected by the introduction of the Great Northern overpass to the east of the plant in the early 1940s but the plant had only existed briefly before its construction. Integrity of setting has been also slightly compromised by the removal of the four storage tanks, a warehouse, and several smaller buildings. The Export Plant buildings retain integrity of design, materials and workmanship, with minor alterations including the closure of openings by plywood on most buildings and the small steel awning addition and steel cyclone frame to expanding plant building.

The extant W.R. Grace Export Plant is able to convey its historic association and feeling as an twentieth century industrial facility.

Significance

The W.R. Grace Export Plant (24LN1812) is considered significant under Criterion A for its historic association with the mining and commercial development of vermiculite in the region. The mining of the vermiculite deposits seven miles northeast of Libby was the first such operation in the United States. The export plant in Libby was a component of this larger vermiculite mining operation and served as an expanding, bagging, shipping and storage facility for the vermiculite. Although the lumber industry is generally recognized as the primary industry in the region, vermiculite mining and production was the longest lived mining operation in the region for over six decades. The Export Plant in Libby is also one of the few remaining vestiges of the vermiculite mining operation, as reclamation has obliterated the mine and complex in the Rainy Creek area.

The W.R. Grace Export Plant is not considered significant under Criterion B as it is not associated with any person or persons important to local, regional, state or national history. The site is not considered significant under Criterion C for its architectural value, as the extant

buildings do not exhibit distinctive architectural characteristics. The site is not considered significant under Criterion D as it is not expected to yield any important information in prehistory or history.

Recommendation

The W.R. Grace Export Plant (24LN1812) is recommended eligible for listing in the National Register of Historic Places under Criterion A for its historic association with mining and commercial production of vermiculite and for its historic association with the economic development of the town of Libby, Montana.

DETERMINATION OF EFFECT

The proposed EPA mandated abatement and/or removal of asbestos and vermiculite at the W.R. Grace Export Plant in Libby will have no effect on the identified historic buildings. The proposed removal action includes cleaning and encapsulation of all the buildings. The process for encapsulation consists of covering the exterior of the buildings with 6-mil poly (secured by firring strips screwed into the walls thus allowing for non-destructive removal). The interior of the buildings will then be washed and cleaned. After the building is completely clean, a clear resin material will be sprayed on all exposed interior surfaces. The poly and firring strips will then be removed. Internal walls and wood floors will be removed (Lindstrom 2000). The encapsulation will not affect or alter the historic characteristics of this historic property that qualifies these buildings for the National Register of Historic Places. The proposed treatment should not damage the historic materials. The ground surface area will be excavated to a maximum of 18 inches and then returned to its original surface to be covered with gravel and grass. The surface of the site has been previously disturbed by grading.

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APPENDIX

Site Form 24LN1812

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM
Form No. 1 Locational Information

1.1 Smithsonian Number: 24LN1812

1.2 Field Designation: Grace Export Plant

1.3 County: Lincoln

1.4 Township/Range/Section: T30N R31W Section 3, NW1/4 NW1/4

1.5 UTM Coordinates: **Zone** 11 607260 **Easting** 536180 **Northing**

1.6 Property Type/Types: Industrial

1.7 Recording status: x **surface examination** x **photo** x **mapped** _ **tested**
Comments and recommendations:

1.8 Administrative/surface ownership: City of Libby

1.9 Mineral Ownership: NA

1.10 Project Name: W.R. Grace Export Plant
Project Number:

1.11 General Narrative Description of Property: This site consists of extant buildings of the W.R. Grace Export Plant in the northeastern portion of the town of Libby, MT. The site is presently utilized as a lumber yard and building supply and modern building and structures of the . The site contains 11 features including seven buildings (five historic), two structures (one historic), one concrete slab and three railroad spurs (one historic). T

1.12 Map Reference (Attach 8-1/2 x 11 USGS Photocopy): Libby, Mont. 1963 Photo Revised 1983

1.13 Vicinity of: Libby, MT

1.14 Narrative of access: Head north on Highway 37 through the town of Libby, MT. After driving over the railroad overpass, take an immediate left (west) onto Thomas Street. The site is located directly south/southwest of the street between the railroad and the Kootenai River.

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 2 Environmental Setting

Site No. 24LN1812

2.1 Geographic Setting: River terrace

2.2 Elevation: 2070 feet

2.3 View/aspect (estimated direction and distance): NA

2.4 Major River Drainage: Kootenai River

2.5 Minor Drainage: NA

2.6 Available water sources

Names	Distance	Elevation Change	Type
1. Kootenai River	300 feet to north	slight	major drainage

2.7 Vegetation - regional: Cottonwood, pine

2.8 Vegetation - local: Exotic weeds and grasses

2.9 Sediments/Deposition: Gravels, mixed rock

2.10 Surface Visibility/season of survey: fair/ summer

2.11 Other environmental factors pertaining to site: Site area appears to have been entirely graded.

3.1 Condition/Integrity: Fair condition. Site retains integrity overall with minor alterations

3.2 Evaluation: Does this property meet National Register criteria for eligibility
__X__ **yes** __ **no**

Evaluation Procedures/Justification:
The W.R. Grace Export Plant (24LN1812) is considered significant under Criterion A for its historic association with the mining and commercial development of vermiculite in the region. The mining of the vermiculite deposits seven miles northeast of Libby was the first such operation in the United States. The export plant in Libby was a component of this larger vermiculite mining operation and served as an expanding, bagging, shipping and storage facility for the vermiculite. Although the lumber industry is generally recognized as the primary industry in the region, vermiculite mining and production was the longest lived mining operation in the region for over six decades. The Export Plant in Libby is also one of the few remaining vestiges of the vermiculite mining operation, as reclamation has obliterated the mine and complex in the Rainy Creek area.

The W.R. Grace Export Plant is not considered significant under Criterion B as it is not associated with any person or persons important to local, regional, state or national history. The site is not considered significant under Criterion C for its architectural value, as the extant buildings do not exhibit distinctive architectural characteristics. The site is not considered significant under Criterion D as it is not expected to yield any important information in prehistory or history.

3.3 Possible impacts to site: Asbestos removal is not expected to impact to buildings. Entire surface area will be disturbed

3.4 Recommendations:

3.5 Site located by: NA **Date:**

3.6 Site recorded by: Joan L. Brownell **Date:** July 30, 2000

3.7 Site form update and revisions by: **Date:**

3.8 Federal or State Permit no.: NA

3.9 Publication(s)/Report(s) where site is described: Brownell, Joan L. "Cultural Resource Inventory Report of W.R. Grace Export Plant, City of Libby, Lincoln County, Montana" Prepared for URS Corporation, Denver, CO, August 2000.

3.10 Artifact Repository: NA

3.11 Field notes/maps/photo repository: Brownell, Billings, MT

5.1 Property boundaries and justification:

9.917 **measured**

The site is bounded to the east by Montana Highway 37, to the south by the Burlington Northern Santa Fe Railroad, to the east by a stand of douglas fir trees and to the north by Thomas Street with the Kootenai River beyond.

5.2 Physical description of buildings/structures/features:

The W.R. Grace Export Plant is situated on approximately 10 acres within the town of Libby, Montana. The site consists of five historic buildings associated with the original operation. The historic buildings include the expanding plant (now a planer and storage building), the raw storage building (now housing lumber), the bagging plant (also lumber storage), a scale building (also lumber storage), and a wood frame storage building (used for storage). Three railroad spurs are also found within the project area. One is abandoned and two are still operable. There is one historic structure, a loading dock and a modern structure, a cyclone dust separator. The site also contains two modern buildings, the retail office and a small shed. There is also a concrete foundation that once held a dry kiln.

Feature 1: Expanding Plant (Lumber Storage)

This one-story rectangular wood frame historic building sits on a low concrete foundation. The main building measures 80 feet north/south by 32 feet east west. The building has a gable roof covered with corrugated metal siding with slightly extended eaves and visible rafter ends. A superstructure sits near the center of the ridgeline on the east roof slope. It measures 10x10 feet, has a shed roof and is covered with corrugated steel. A small entry is located on its south wall. On the west slope near the center of the ridgeline is a shed roofed wood louvered vent and a tall protruding stovepipe.

All walls are clad with corrugated metal. A row of window openings (boarded shut with plywood) span the east and west walls with nine openings on the east wall and eight on the west wall. The east wall also contains a wood door at its south end. The west wall holds a loading wood door mid-wall at its north end. The south end wall has a centered wood door topped by triple multi-paned window (panes missing). Vertical beadboard tongue and groove double doors are centered on the north end wall surrounded by a large frame opening now infilled with plywood (original opening?).

A steel frame open sided shed roof awning (20 feet by 18 feet) that houses the planer extends off the addition to the north. Steel beams are set on concrete piers. A recently constructed wood frame enclosure that measures 16 feet by 18 feet extends off the west side of the north wall under the awning. The enclosure is clad with plywood and has a plywood door on its east wall..

A steel frame structure (19 feet x16 feet) also stands 10 feet west of the building towards the north end. This steel frame functions as a truck ramp and holds a cyclone dust separator that is connected to the main building by a large pipe.

The building is presently used for lumber storage and planing. It contains one large room and several smaller room and two restrooms. According to Alan Stringer, this was originally the expanding room which heated the vermiculite into the commercial product Zonolite (Stringer 2000). The same building is shown on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953;14). Earl Lovick mentioned that women worked at the expanding plant in the town of Libby but by 1980, W.R. Grace used the building for storage space and used one room as a training room (Lovick 1980). According to Mel Burnett, who operates Millwork West Lumber,
the planer awning and cyclone structure were built around 1986 by Jim Ray. Burnett enclosed the planer around 1994 (Burnett 2000).
The integrity of this building has been slightly compromised by the closure of most openings and the introduction in its northwest corner of a steel awning, planer enclosure and the cyclone structure. It is in fair condition.

Feature 2. Raw Storage Building(Lumber Storage)

This large rectangular historic building is of post and beam construction and measures approximately 71 feet north/south by 84 feet east/west. The posts are set in square concrete piers that vary in height along its length and a low concrete wall fills

the space between the piers. The building has a low gable roof covered with corrugated steel and extended eaves with exposed rafter ends. Cross braces support the posts at the roof.

The lower portion of the north side is partially sided with plywood across its lower wall. Barbed wire runs along the top of the plywood and the rest of the wall is open. The east wall of the building is enclosed with corrugated metal on its northern portion and a chain link fence across the lower remaining wall. The open upper wall is partially covered by a large wood sign that reads "Millwork West Retail Lumber." The lumber office (Feature 3) sits directly in front of the east end wall.

The south and west walls are covered with corrugated steel over horizontal boards. The walls are slanted resulting in a irregular slanted southwest corner. The gable end is open and a space separates the roof and the south wall.

A dump hopper and bucket elevator stands at the center of the east end of the building. The concrete floors exhibit two sets of parallel raised tracks that run the length of the building to either side of the hopper.

According to Alan Stringer, this building was for raw storage of vermiculite (Stringer 2000)
Eldon Adkinson, who works at the lumber yard, remembers as a boy jumping into the raw material from a rope swing tied to the rafters of this building (Adkinson 2000). The 1942 revision of the 1927 Sanborn Map shows a similar building identified as a loading shed and the slanting south wall is visible. This building is also shown on a 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14). A 1983 assessor report identifies this building as a raw stockpile (Lincoln County 1983).

The building is in fair condition and retains good integrity with minor alterations to wall coverings.

Feature 3. Office
This modern small wood frame rectangular building measures 14 feet north/south by 16 feet east/west. The building has a gable roof covered with asphalt shingles and extended enclosed eaves. The building sits on concrete pads and has I beams for floor joists. It is clad overall withshiplap siding with corner boards, with vertical board on the upper portion of the south wall. Both side walls have a nine light window covered with metal mesh. The west end wall is symmetrical with a centered door entry framed to either side by a nine light window covered with metal mesh. Decorative elements to the building include architrave trim and fluted columns at the door frame, white picket fence wall sections to either side of the door and a scalloped vergeboard. Three wood stairs and a small wood stoop approach the doorway.Mel Burnett built this building on site around 1994 (Burnett 2000). It is in good condition.

Feature 4. Bagging Plant (Lumber Storage)
This large rectangular historic building measures 108 feet east/west by 32 feet north/south. The building has a gable roof covered with corrugated steel. A row of three shed roof dormers extend off the south roof slope near the east end wall. The side walls of the dormers are clad with corrugated metal and the end walls of the dormers are boarded shut.
The building sits on a high concrete foundation with steel L beams set on top of the concrete. The building is interior sheathed with 12X2 feet boards with external 8x8 feet beams with wall reinforced with cable. The east gable end is covered with horizontal boards and has openings now boarded shut with plywood. The east end wall holds a centered sliding wood door (covered with metal plate). A metal ramp approaches the sliding door.

The south wall contains two horizontal tongue and groove double doors adjacent to each other. Towards the eastern portion of the wall are two openings with a single glass pane. The north wall at its northwest end has a double metal door topped by an opening (boarded shut with plywood) that apparently held a conveyor. An open sided shed roof awning projects to the north. It has concrete piers with hollow beams to support the roof. It is presumed that the conveyor loaded bags of Zonolite into railcars on the spur track.

An abandoned railroad spur parallels the entire north side of the building. A wood deck (3 feet wide) runs along the length of the building and north of the spur a concrete slab (5 ft wide) runs the length of the building.

In front of the east end of the building is a concrete ramp (24 feet by 12 feet) that approaches a concrete dump hopper. The hopper is sheltered by a open sided gable roof shed supported by wood posts. A bucket elevator is centered against the east

end wall and protrudes through the gable roof to above the gable roof. A compressor sits on a platform at the top of the elevator. A metal stair protected by a metal cage climb the wall to the top of the elevator. Chain link fence surrounds the hopper and elevator .

The 1942 revision of the 1927 Sanborn map identifies this building south of the spur track as a Zonolite warehouse (Sanborn 1927). The building is visible on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14)). The 1983 County Assessor report identified this
building as the export bagging building (Lincoln County 1983). MartinMcCann remembers that the bags were heavy paper, about the size of a large flour sack (McCann 2000). Jack Deschazer thought that most of the bagged materials was for local use (Deschazer 2000).

The building is in fair condition and retains its historic appearance and character.

Feature 5: Scale Building (Lumber Storage)
This wood frame historic building measures 47 feet north/south by 53 feet east/west . It sits on a low concrete foundation. The building has a gable roof with a shed extension to the north. The roof and gable ends are covered with corrugated metal. The side walls are also clad with corrugated metal. The gable end walls are filled with large sliding doors, one half corrugated metal and the other half wood corresponding at each end. The east end wall of the shed extension has double wood doors while the west end wall just holds a opening boarded shut with plywood. The north wall has a row of four large openings, two filled with plywood and two covered with plastic. A six light window is towards the east end of the wall. The south wall holds four openings all boarded shut with plywood.

The interior of the building still holds the scale and weights. The building is in fair condition and has retained integrity with minor alterations primarily the closure of openings with plywood.

According to Alan Stringer, this was the Scale house (Stringer 2000). No scale house is shown on the 1942 revision of the 1927 Sanborn map, indicating it was constructed after 1942. Although it is difficult to see, the roof line of this building appears visible on the 1953 aerial photograph of Libby (*The Spokesman-Review* 1953:14), thereby indicating the building was erected between 1942 and 1953. It still contains a functioning Fairbanks scale. The scale was last used for weighing rocks several years ago (Burnett 2000)

The building is in fair condition and retains good integrity although slightly compromised by closure of most openings.

Feature 6. Storage Building
This wood frame rectangular gabled roof historic building sits on a low concrete foundation and measures 32 north/south by 56 east/west. The gable roof is covered with corrugated steel with an extended roof slope and exposed rafter ends. A superstructure sits centered on the roof. The walls and roof of the superstructure are covered with corrugated metal. The east and west sides both contain a centered opening boarded shut. The north and south walls hold a pair of openings also boarded shut.

Shiplap siding clads the walls. The north wall has openings (now boarded shut) at either end of the wall. The south wall has three openings (also boarded shut) that span the wall and a large wood door topped by a transome (boarded shut). Both the east and west end walls hold centered sliding vertical tongue and groove doors that extend into the gable end. Above the doors are centered paired openings, with the west opening still exhibiting some framing.

This building is not shown on the 1942 revised 1927 Sanborn map but is visible in its present form on the 1953 aerial photograph of Libby (Sanborn 1927, *The Spokesman-Review* 1953:14), indicating it was constructed between 1942 and 1953. Alan Stringer stated this building was used for storage (Stringer 2000).

The building is in fair condition and retains overall integrity with minor alterations of boarding shut most openings.

Feature 7. Shed
This small modern shed measures 5 feet by 7 feet and sits on I-beams. It has a gable roof covered with corrugated metal, a metal ridgecap and extended eaves with exposed rafters. The shed is clad with beveled tongue and groove shiplap board

with corner boards. The south wall contains a wood plank door. The interior of the shed is finished with tongue and groove. The shed is in good condition. This shed was built byMel Burnett with materials he donated for the dry kiln project at the site location (Burnett 2000).

Feature 8: Loading Dock (east)
This loading dock consists of a concrete platform that measures 15 feet square and a concrete ramp that measures 20 feet by 8 feet. I-beams run along the sides of the ramp and two sides of the platform. Iron clamps are set along both walls of the ramp and the short wall of the platform. The platform stands approximately 35 inches in height.

The railroad spur ended just beyond this loading dock to the north. The 1942 revised 1927 Sanborn map shows a gabled roof building with what appears as an open south wall situated where this loading dock is located. The dock is in good condition.

Feature 9: Loading dock (west)
This modern loading ramp consists of a concrete platform that measures 10.5 feet by 19 feet and a concrete ramp that measures 20 feet by 10 feet. The platform is formed by horizontal railroad ties for side walls filled in with gravels. The ramp side wall are horizontal boards. All side walls are held in place by vertical studs slotted through iron clamps.

Mel Burnett built this loading dock in 1996 (Burnett 2000)

Feature 10: Railroad Spurs
Three railroad spurs enter the site area from the west. One spur was abandoned approximately six years ago and two others are still active and used for the lumber business. The abandoned spur extends to the north of the storage building and runs along the entire length of the Bagging Plant and ends beyond the concrete ramp.

According to Martin McCann, this was called the "Z-bag" spur. He remembers replacing the railroad ties to this spur several times. He also remembers that only 1 or 2 cars and sometimes three would move the bagged Zonolite to ship from this site. Don Wolley of the Burlington Northern Santa Fe thought that the Great Northern probably built and maintained the spur but that Grace owned and paid for it (McCann 2000; Wolley 2000).

Feature 11. Concrete slab
This concrete slab measures 10 feet wide and 110 feet in length. It consists of three sections, the center section being slightly lower with an adjacent small concrete slab with plumbing fixtures.
The foundation is from a dry kiln that was built around 1994-95. The dry kiln was recently moved to Troy (Burnett 2000).

5.3 Artifacts observed, collected: NA

5.4 Subsurface testing methods and results: NA

5.5 Historic information and context:
Earl Lovick, in a 1980 interview, mentions the existence of an expanding plant operated in Libby. This facility in Libby was known as the Export Plant or Expanding Plant where the vermiculite would be heated, expanded and then bagged for shipment. Many locals call this process "Popping." Vermiculite was also stored at this location. The concentrate was hauled by truck to Libby to the export plant where it was expanded or shipped unexpanded. However, most of the vermiculite was shipped as crude vermiculite to expanding plants throughout the country. According to Martin McCann, a retired railroad division engineer, the vermiculite was cheaper to ship raw rather than expanded, where the ratio was one car versus eight cars expanded. Jack Deschazer thought that most of the bagged Zonolite in Libby was locally used (Lovick 1980; Stringer 2000; Deschazer 2000; Perry 1948:24-25; McCann 2000).

The 1893 General Land Office survey map for this site location shows a residence identified as Leonard between the railroad tracks and the Kootenai River in the NW1/4 of Section 3, T30N R31W. However, Lincoln County deed records show Frank Leonard did not obtain title to the property until February 1898 when he purchased the land from a trust company representing the Northern Pacific Railroad. Most of the town of Libby belonged to the Northern Pacific Railroad as part of their land grant provided by Congress in 1864, a claim that was rectified in 1897 (General Land Office 1893; Lincoln County 1898; Axline 1999:3).

In February 1901, Frank and Anna Leonard of Libby, Montana transferred to Charles R. Leonard (son?) of Butte, Montana this property described as approximately 13 acres of land "along the south bank of the Kootenai." In July 1906, Charles and Fanny Leonard of Butte transferred back to Frank the same property in Section 3 T30N R31W consisting of 13 acres or less. Frank Leonard in February 1909 once again transferred the property to Charles Leonard. This time the Leonards of Butte held the land until the end of July 1937 when Ralph Smithberger of Libby purchased the property (now 15 acres or less). Smithberger immediately sold the same to the Zonolite Company in August 1937 (Lincoln County 1901, 1906, 1909, 1937). In 1939, this property became part of the newly formed Universal Zonolite Insulation Company, a merger of the Zonolite Company and Universal Insulation Company (Northwest Archaeological Associates 1994:209).

No buildings are shown at the site location on the 1927 Sanborn Fire Insurance Map for the town of Libby. The 1942 revision of the 1927 Sanborn map shows four buildings and storage bins at this location identified as the Zonolite Co's Storage & Shipping Plant." The formation of the Universal Zonolite Insulation Company in 1939 allowed for the financial capability to construct this export plant between 1939 and 1942 (Sanborn Company 1927; 1942 revision).

The buildings identified on the 1942 revision of the 1927 Sanborn map are a loading shed, an office, two warehouses, and four wood zonolite tanks. Two of the buildings are still standing, the raw storage building and the bagging plant. A railroad spur track is situated between the warehouses and the tanks. The facility evolved and at least six buildings are visible in a 1953 aerial photograph in *The Spokesman-Review* of the site area. Five of the buildings shown in this photograph are still extant today, including the bagging Plant, the raw storage building, the expanding plant, the storage building and the scale building. Since the 1953 photograph, the zonolite tanks and one warehouse have been removed. An 1983 assessor report indicates the loss of several smaller buildings, including a boiler room and two pump house Mel Burnett thought the tanks or silos had been removed in the past 12 years or so (Sanborn Company 1929 (1942 revision); *The Spokesman-Review* 1953:14; Lincoln County Assessor 1983; Burnett 2000).

W.R. Grace purchased the property in April 1963 from the Zonolite Company. The expanding operations at the Export Plant ceased prior to 1981 and area used only for packaging and exporting milled materials after that time. In 1980, Earl Lovick stated that these buildings were only used for storage (Lincoln County 1963; URS Corporation 2000 Lovick 1980).

W.R. Grace held the property until May 1994 when they transferred the land to the City of Libby (Lincoln County 1994). W.R. Grace leased the property to Jim Ray around 1985-86. Ray operated a retail lumber business at this location Mel and Judy Burnett bought the business from Ray in 1989 and presently lease the land and buildings from the City of Libby (Burnett 2000).

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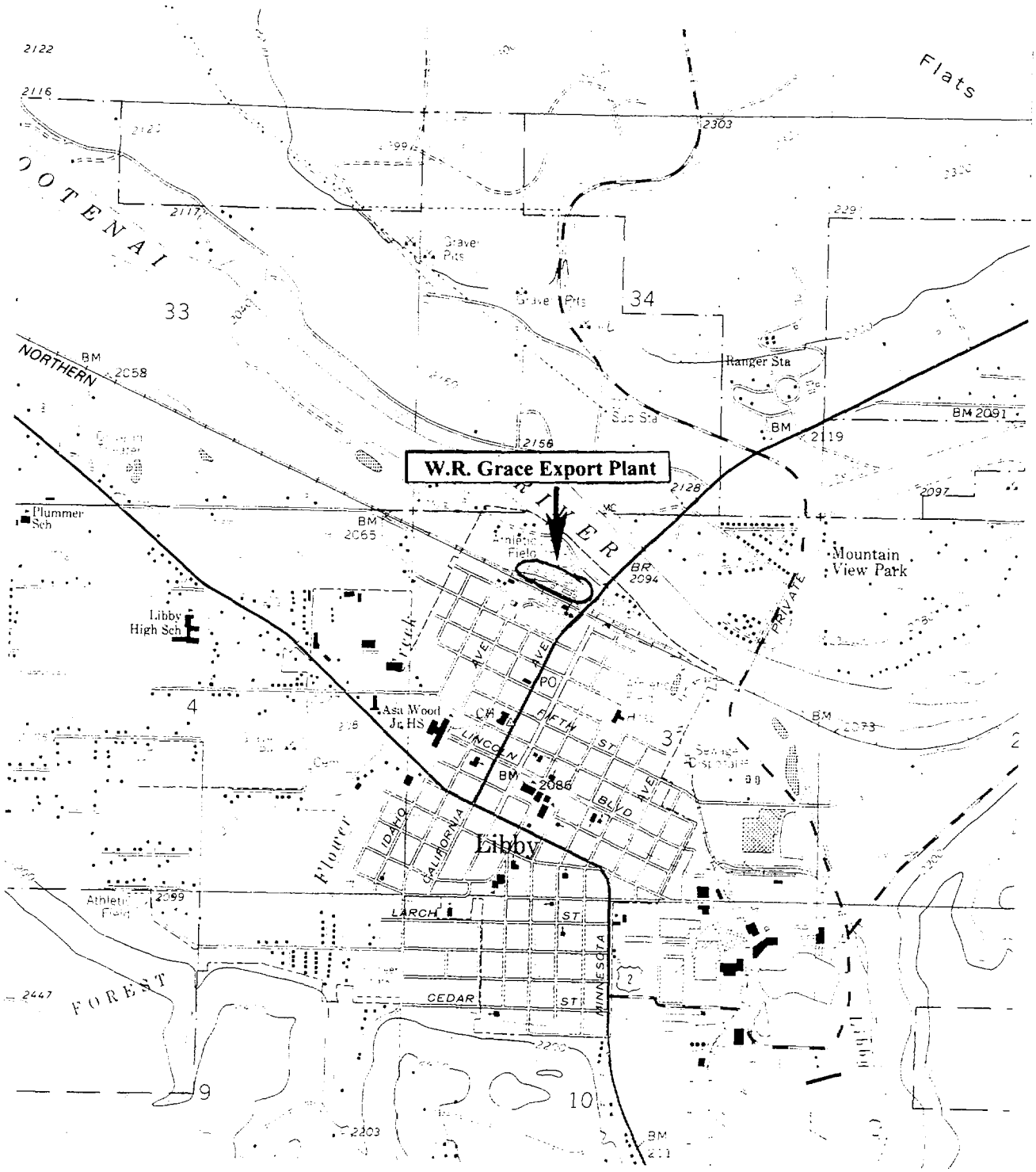
Topographic Map

Site No. 24LN1812

Sec. 3, T30N, R31W
Libby, Mont 1963



Site Map

Site No. 24LN1812

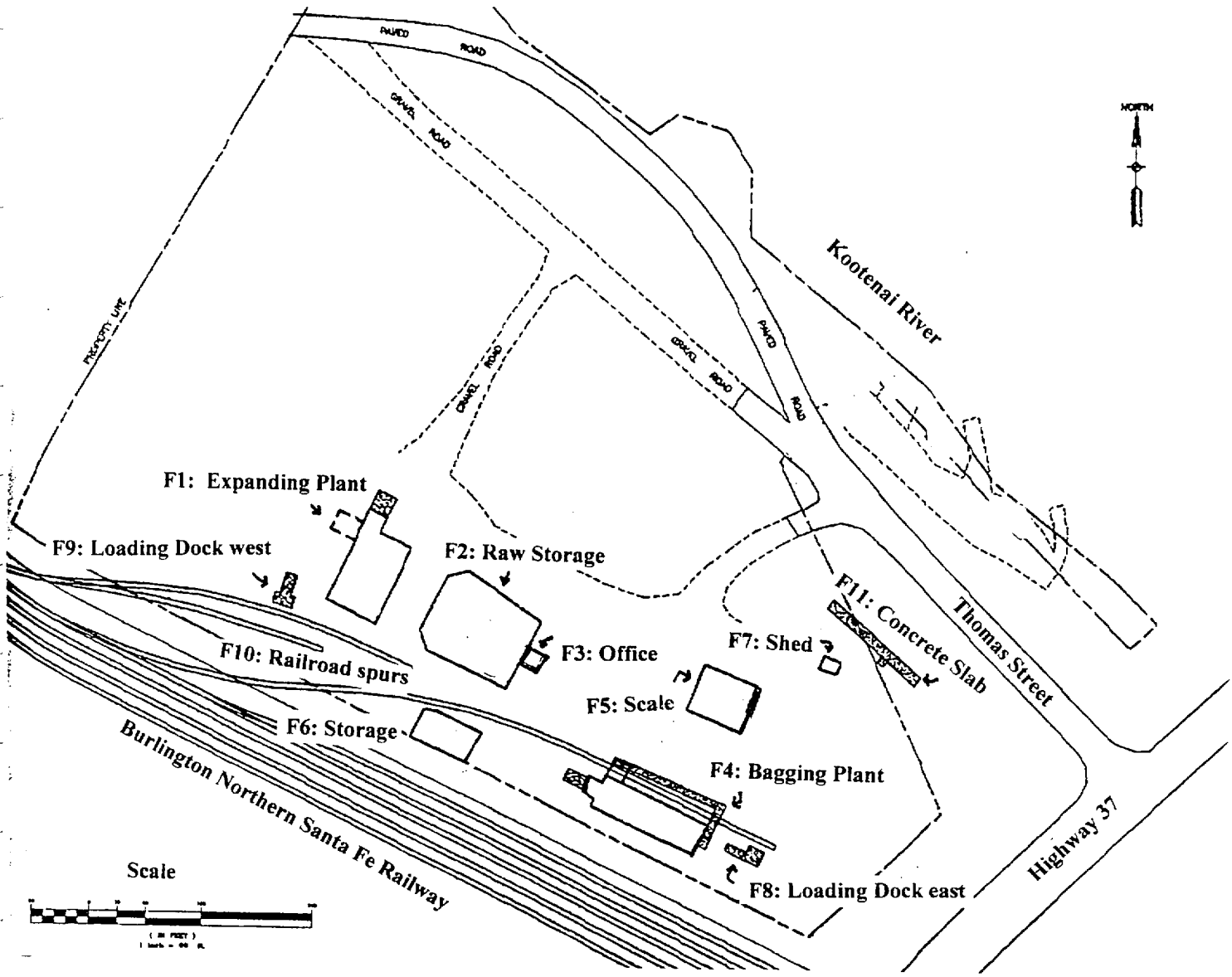
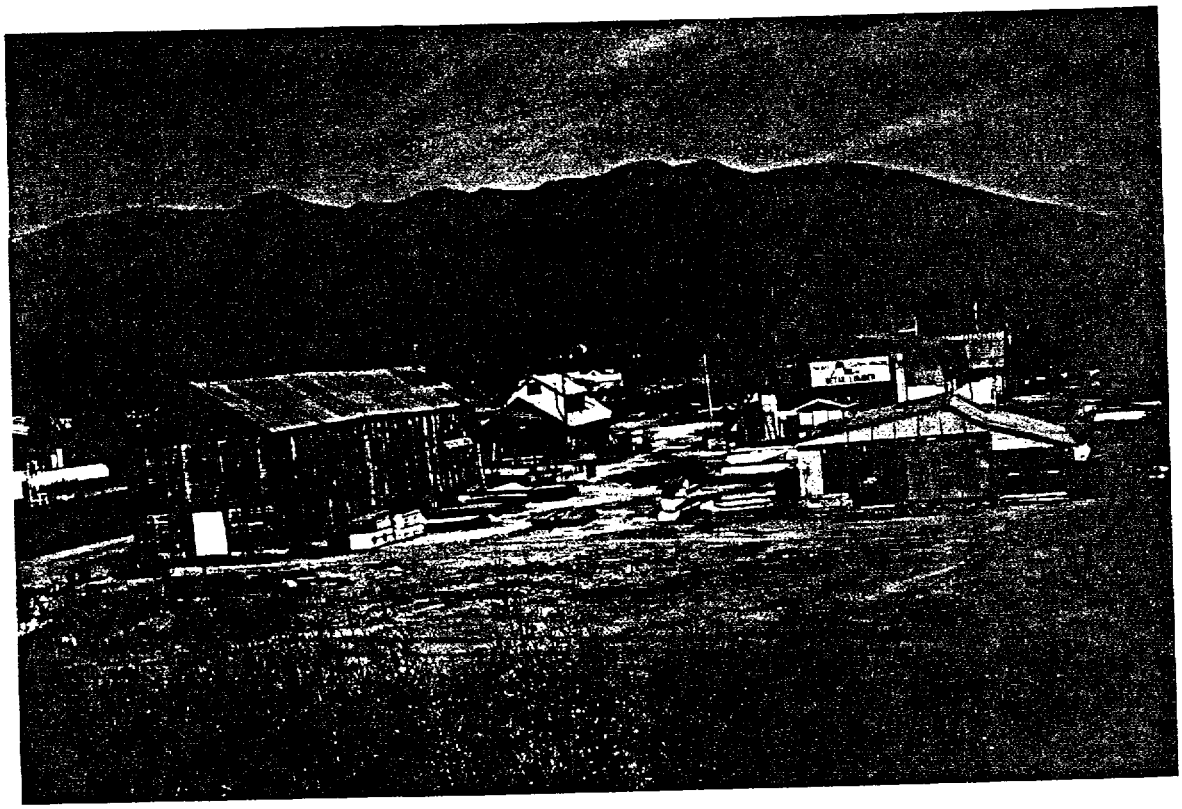


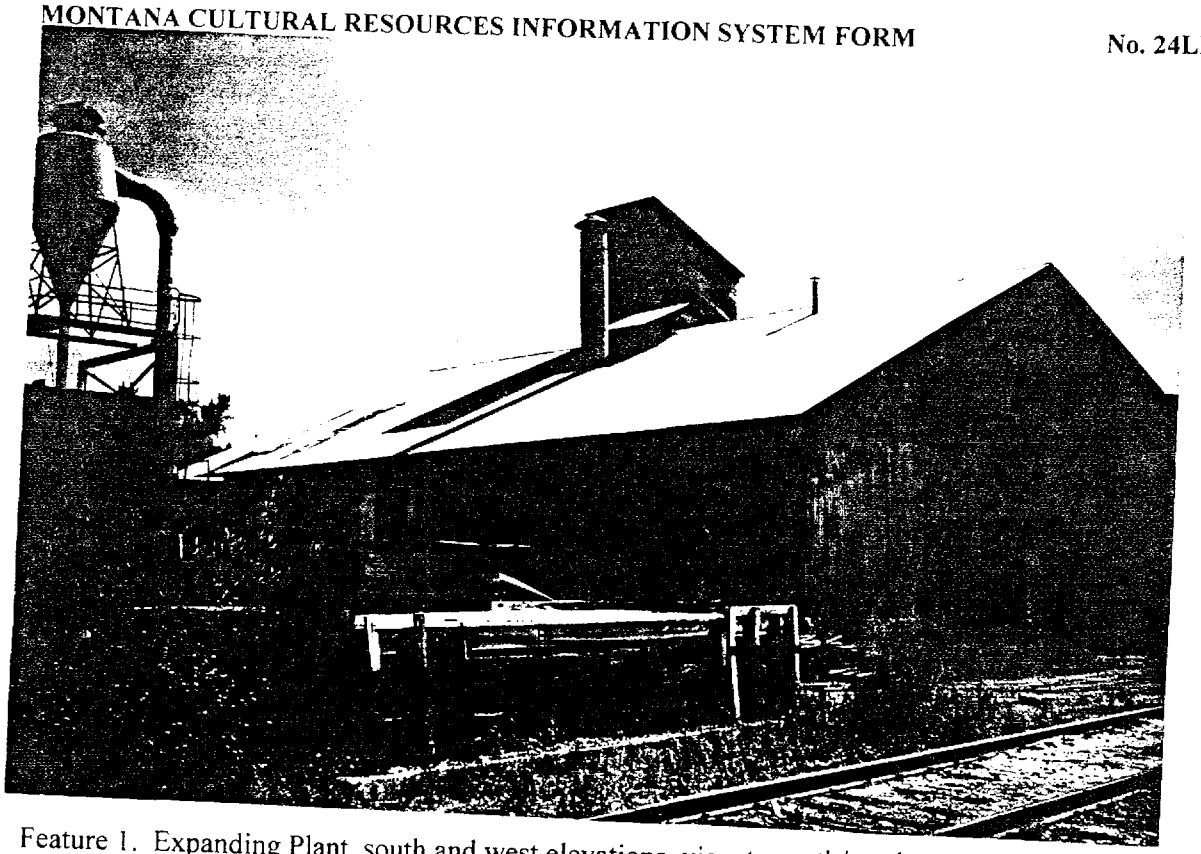
Figure 4: Site Map of W.R. Grace Export Plant (24LN1812)
Map derived from Bowles and Messick July 2000

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM No. 24LN1812

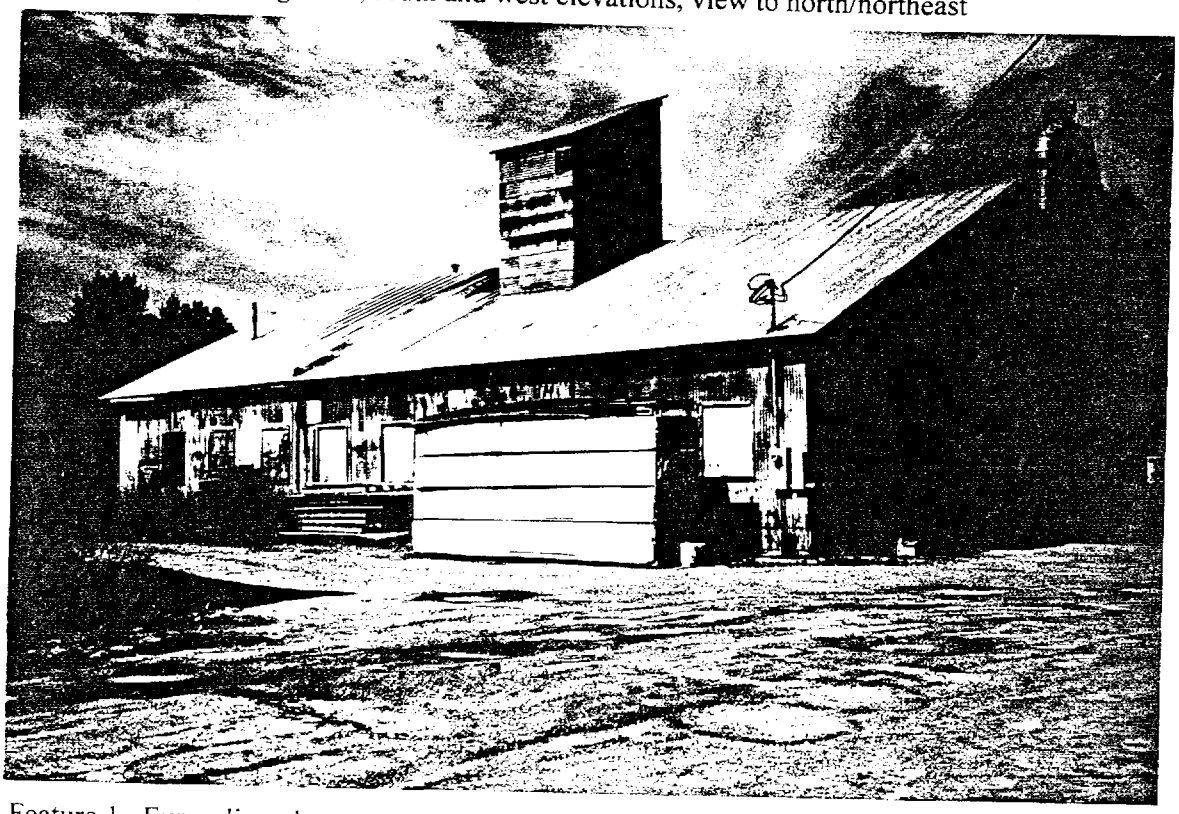
Form No. 5: Photographs



Overview of Site 24LN1812, view to west

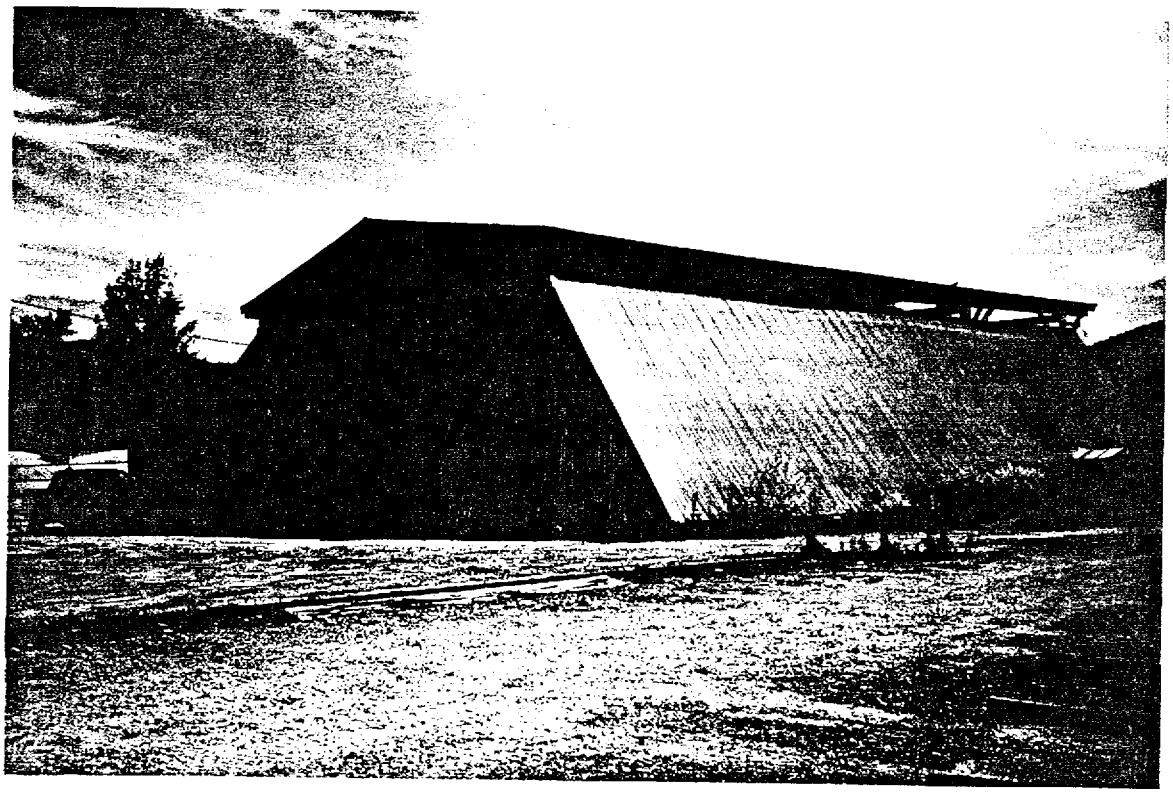


Feature 1. Expanding Plant, south and west elevations, view to north/northeast

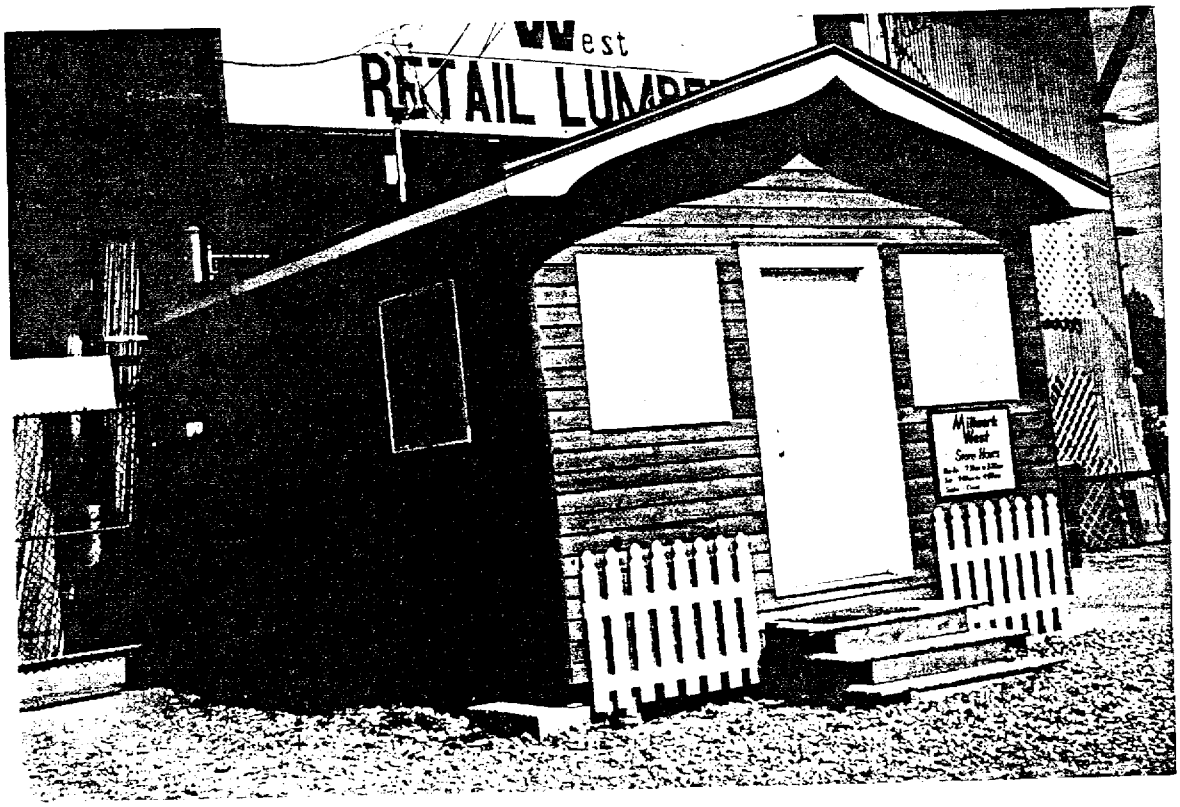


Feature 1. Expanding plant, north and east elevations, view to southwest

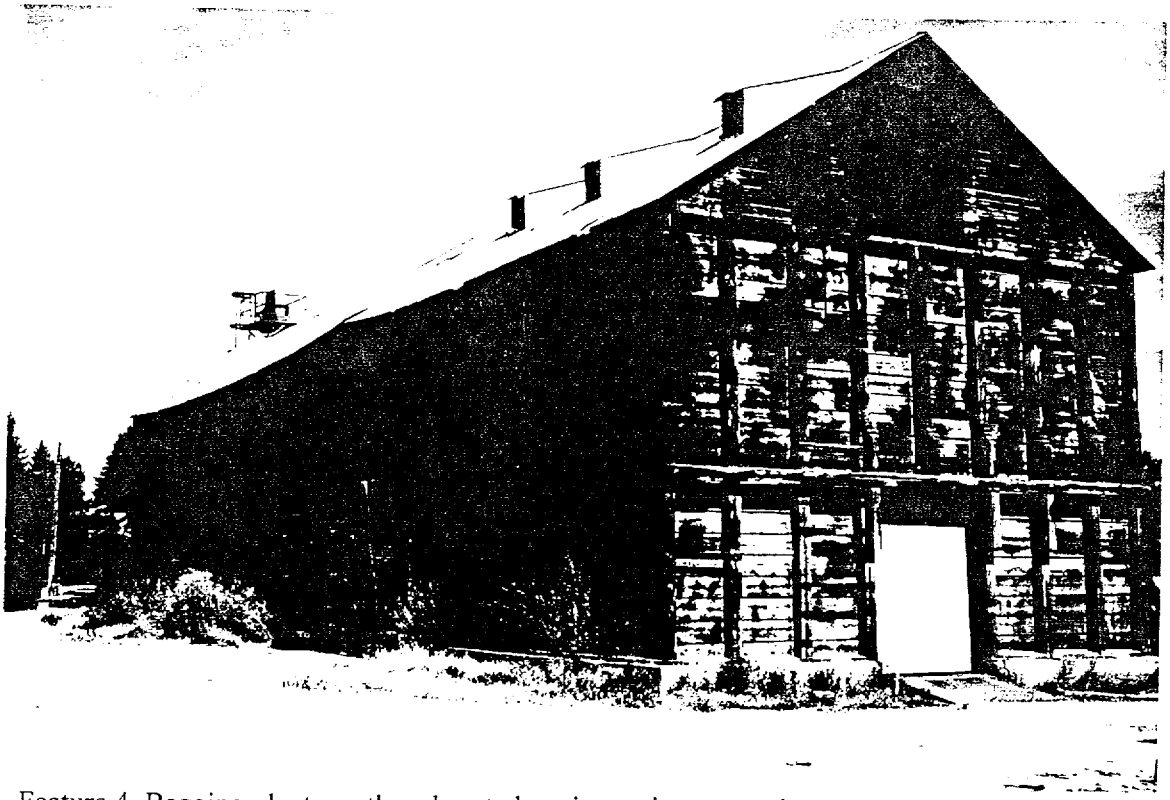
Feature 2. Raw Storage Building, north and east elevations, view to west



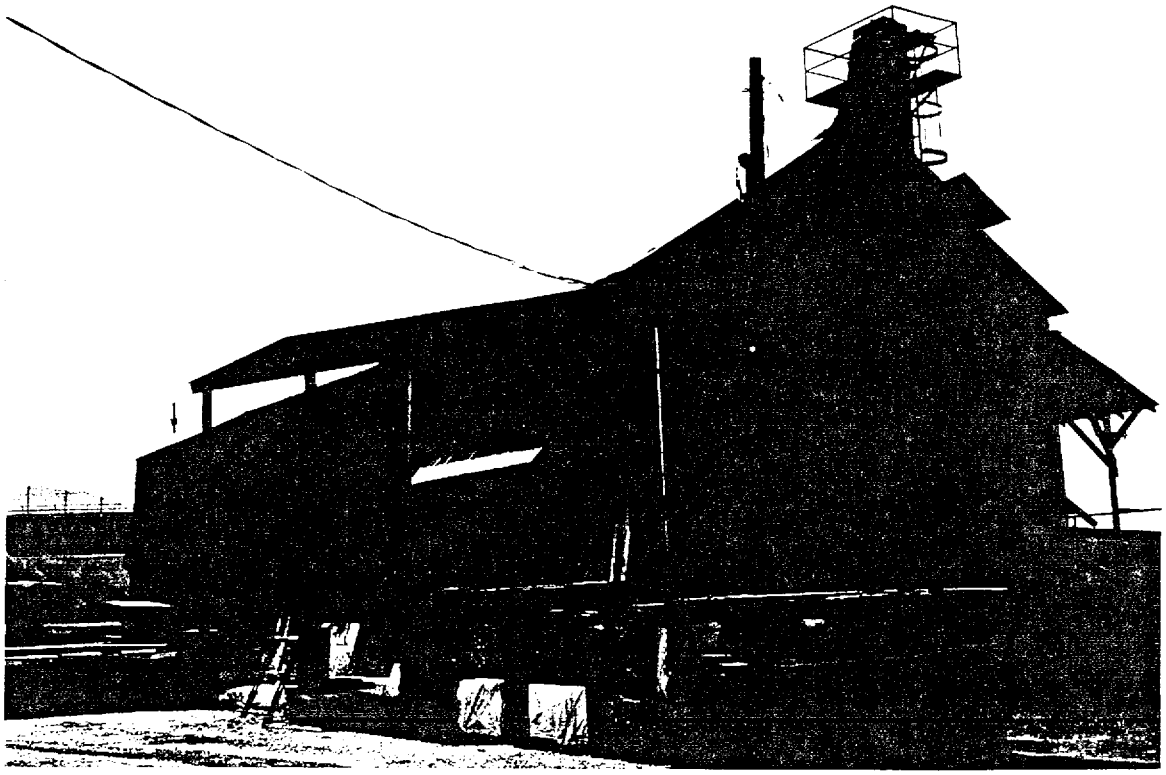
Feature 2. Raw Storage Building, south and west elevations, view to northeast



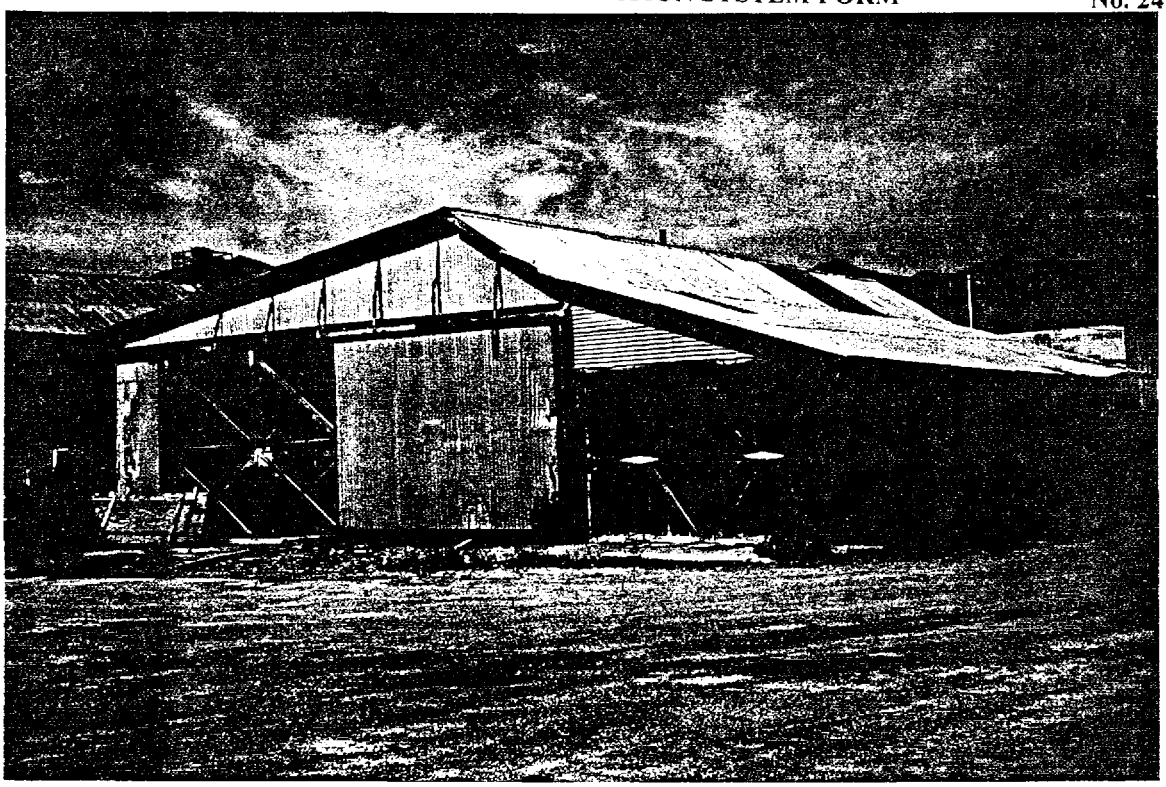
Feature 3:. Office, south and east elevations, view to northwest



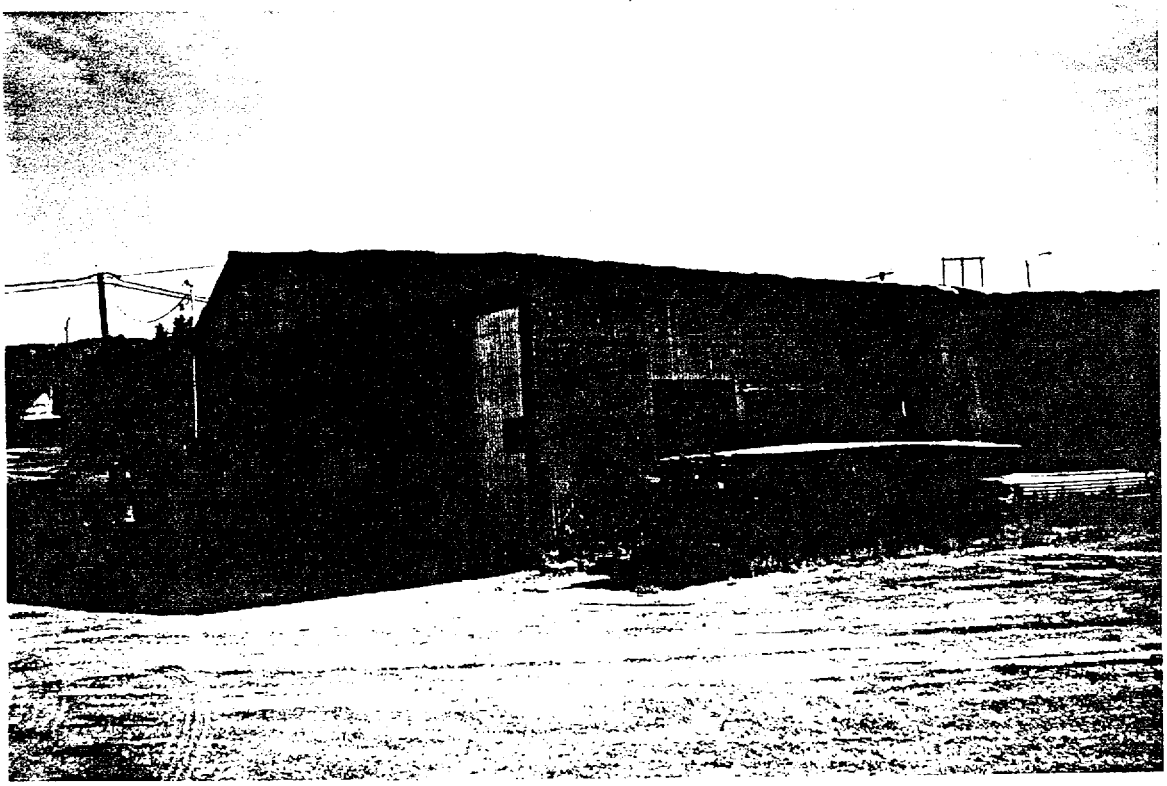
Feature 4. Bagging plant, south and east elevations, view to northwest



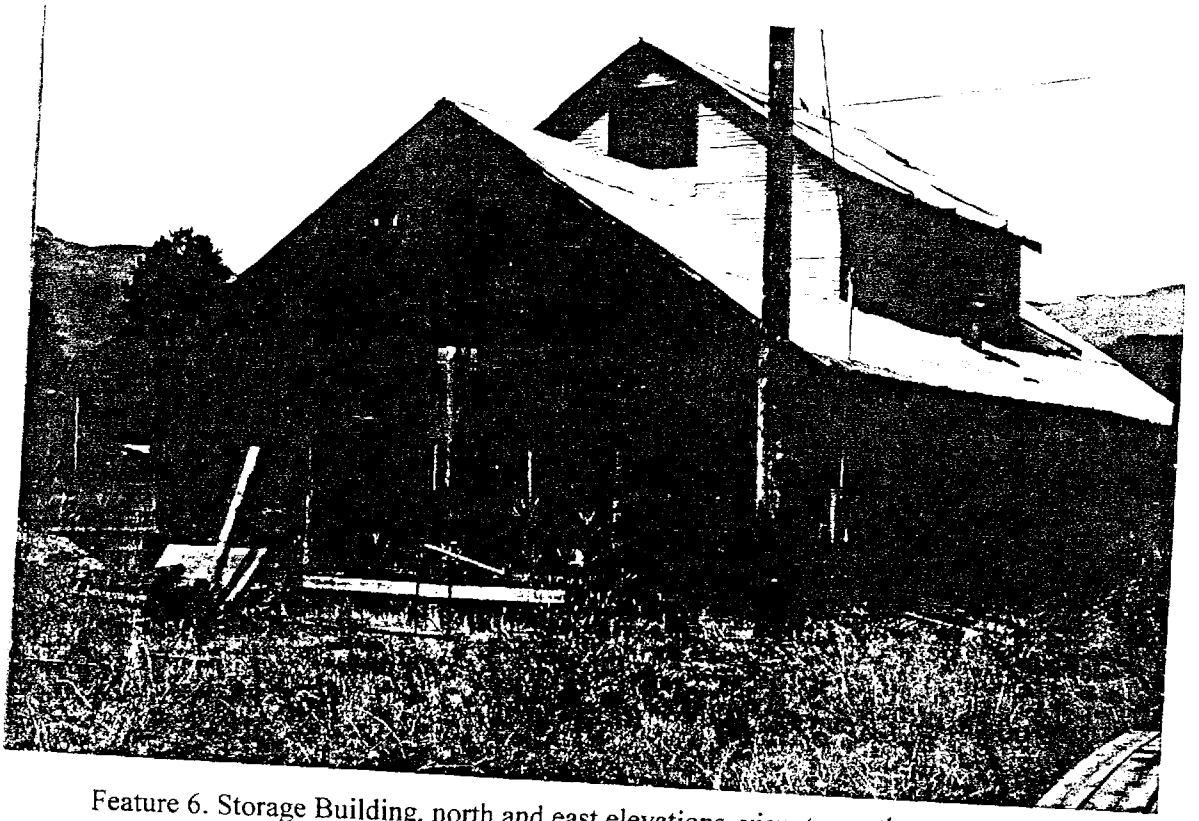
Feature 4. Bagging Plant, north and west elevations, view to south/southeast



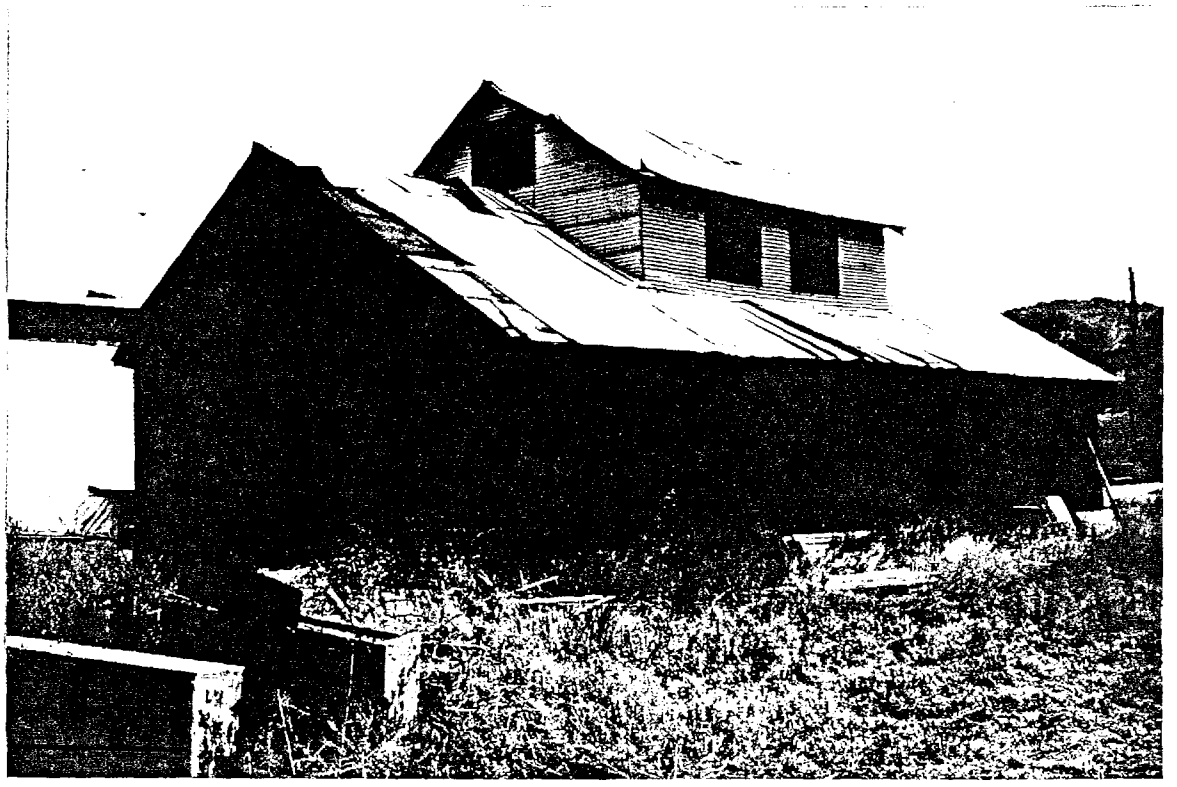
Feature 5. Scale Building, north and east elevations, view to west



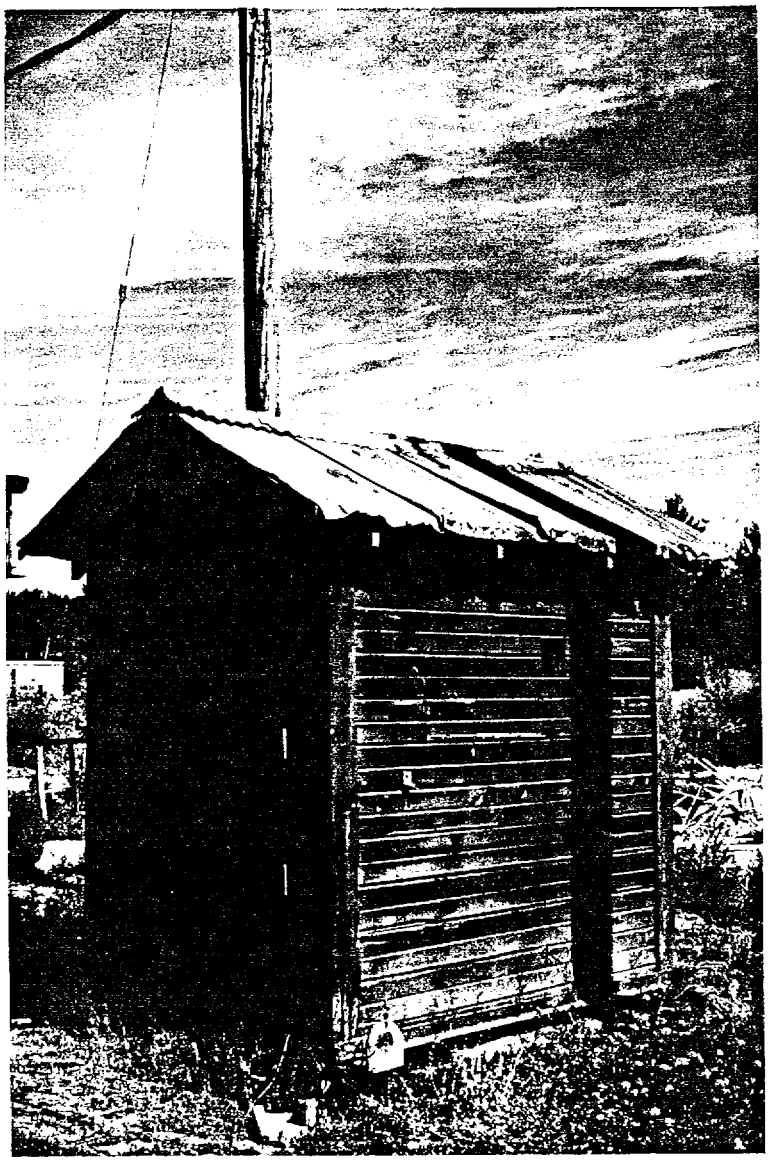
Feature 5. Scale Building, south and west elevations, view to northeast



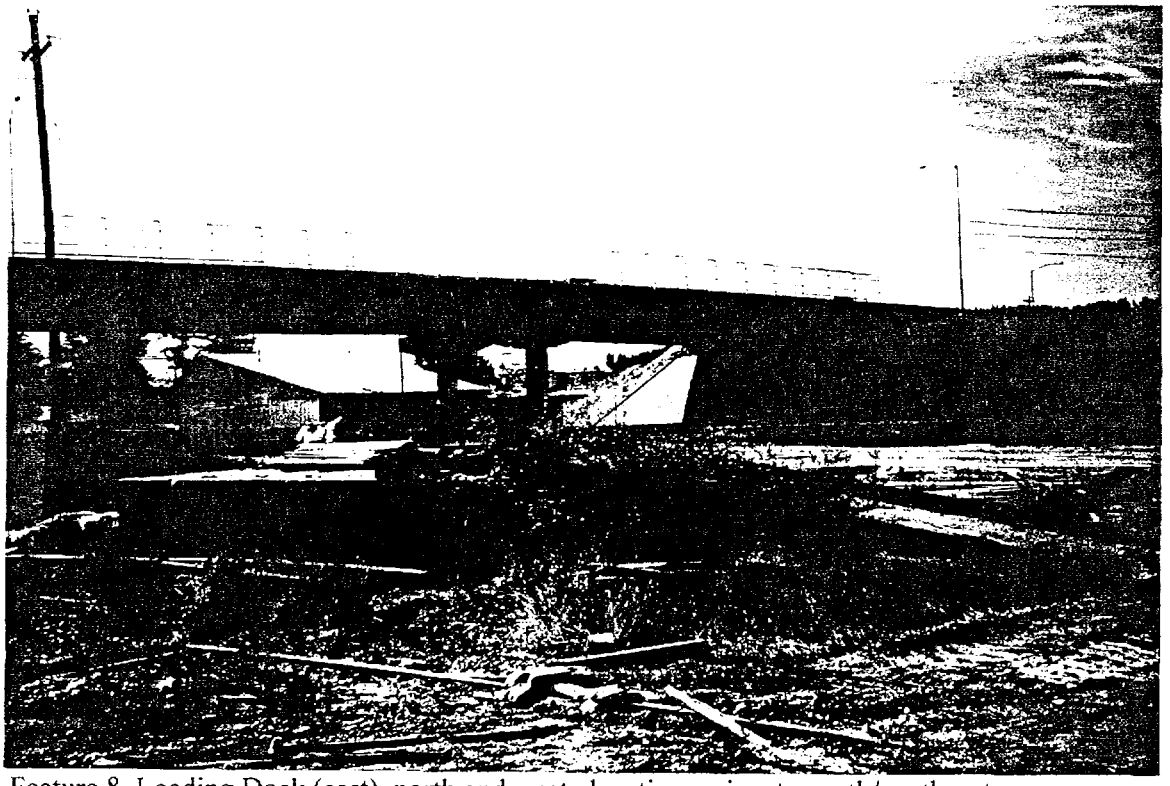
Feature 6. Storage Building, north and east elevations, view to southwest



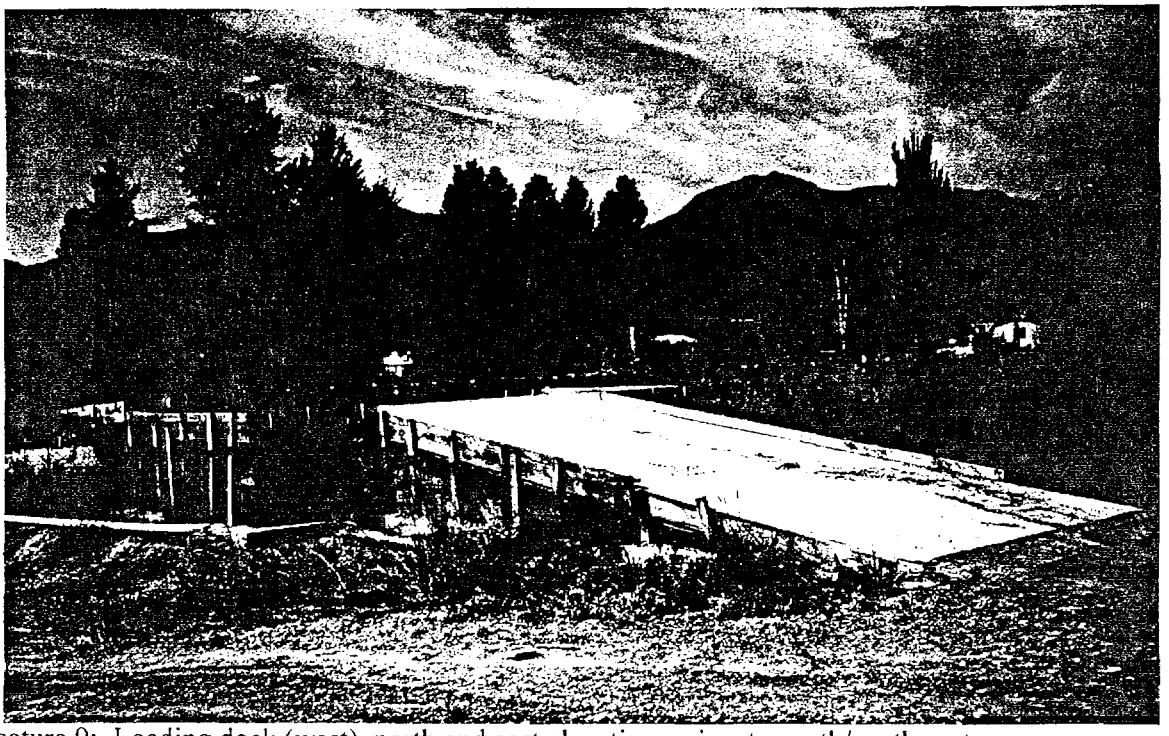
Feature 6. Storage Building, south and west elevations, view to northeast



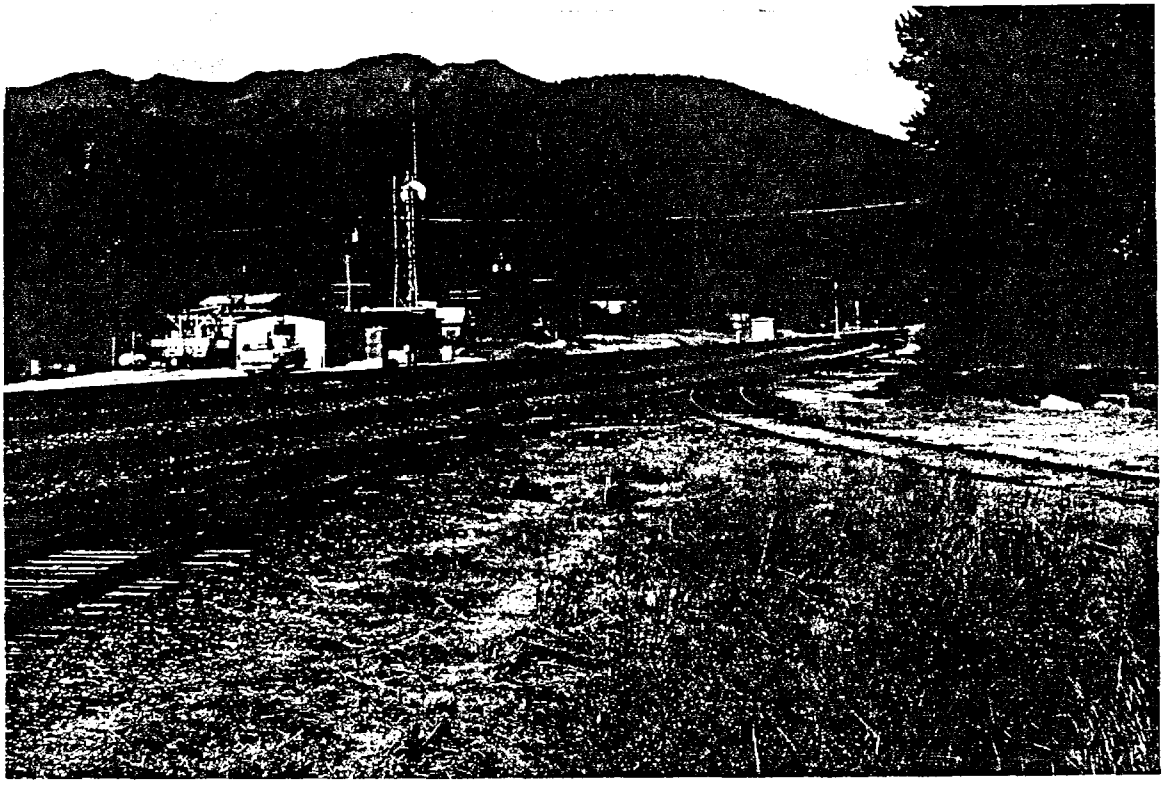
Feature 7: Shed, south and east elevations, view to northwest



Feature 8. Loading Dock (east), north and west elevations, view to south/southeast



Feature 9: Loading dock (west), north and east elevations, view to south/southwest



Feature 10. Railroad spurs, view to west

Feature 11. Concrete slab, view to west